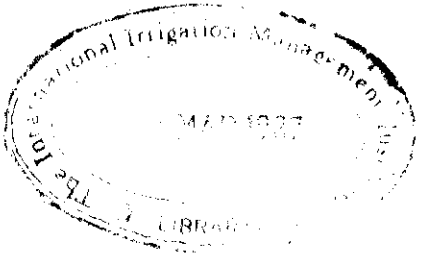
IIMI CASE STUDY NO. 1.

Experiences With Organizing Irrigators Associations: A Case Study from the Magat River Irrigation Project in The Philippines

Honorio B. Bautista



1987
INTERNATIONAL IRRIGATION MANAGEMENT INSTITUTE
SRI LANKA

Citation : *IIMI Pub 86-37*

International Irrigation Management Institute: (IIMI). 1986 Bautista, H.B. 1986. Experiences with organizing irrigators associations: A case study from the Magat River Irrigation Project in Philippines. Digana village, Sri Lanka. 42p.

/water users' associations/irrigation programs/farmer participation/institutional constraints.

DDC 631.7

Summary: The National Irrigation Administration has become well known in recent years for its innnovative experimental programs for promoting farmer participation through strong farmer organizations. IIMI's first case study documents the experience of an irrigation management official, the author of this report, in an effort to organize irrigators associations on the nearly half of the Magat River Multi-purpose Project area in a few short years. Most of these IAs are now effective and active organizations. This experience is a valuable source of lessons and ideas for agency officials concerned with developing water-user associations on other systems.

Please direct inquiries and comments to the:

Communication and Publication Office
International Irrigation Management Institute
Digana Village via Kandy, Sri Lanka

Tel. 74274, 74334, 74251; Tlx. 22318 IIMI HQ CE

The contents of this publication do not necessarily reflect the stated policies or decisions of IIMI. Authors alone are responsible for views expressed in signed articles. All rights reserved.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS

The author wishes to express his appreciation to Dr. Thomas Wickham, Director General, International Irrigation Management Institute, and his staff, especially Drs. A. Valera, S. Miranda and D. Merrey, for having the opportunity to write this case study. I am particularly grateful to Dr. D. Merrey who had patiently corrected the drafts of this report and to all IIMI staff who have contributed significantly to this study through constructive criticism, constant encouragement, and sympathetic support. I owe special thanks to Drs. S. Miranda, D. Groenfeldt, P.S. Rao, E. Martin, and N. Raby who, each in his/her field of speciality, gave me valuable comments.

I wish to thank John Colmey for the final editing, and the Communication and Publication Staff for the printing of this report; as well as Mrs S. Paragahawewa, who meticulously deciphered again and again my handwritten drafts, and the administrative support staff of IIMI who all supported me during my stay at Digana Village. I am also grateful to Mrs. Dulce Miranda, who shops for my food supplies from time to time, and Mrs Gina Cowell who does not forget to say "Hello" whenever she finds me sitting alone in the club restaurant.

My special thanks and appreciation to Engr. C. Billiones, Operations Manager, MRIIS and Atty. Federico N. Alday, Administrator, NIA, Philippines, for endorsing my application for the IIMI Special Award; to the members of the ADCC, ADD and O&M personnel, and farmers who all in one way or another have contributed much to the success in the implementation of the Irrigators Association Development Program of MRMP; to Engr. A. Dulig, former Project Manager MRMP, and former Administrators of the NIA Engr. A. Juinio, Dr. F. Estuar and Engr. C. Tech who in their respective capacities had given me all the support in implementing the program.

Finally, to my beloved wife, Norma and to all our children and two granddaughters (Daphne and Denise), my heartfelt gratitude and thanks for their unlimited support.

FOREWORD

The Magat River Irrigation System is one of the two largest systems in The Philippines, the other being the Upper Pampanga River Integrated Irrigation System. Both irrigate approximately 100,000 ha. Mr Honorio Bautista, the author of this report, and his colleagues on the Magat River Multipurpose Project (MRMP) organized Irrigators Associations (IA) on nearly half the Project area in a few short years. Most of these IAs are effective and active organizations, so the MRMP achievement is indeed remarkable. This experience, through this detailed report, is a valuable source of lessons and ideas for agency officials concerned with developing water users associations on other systems.

The National Irrigation Administration (NIA) of the Philippines is charged with developing both large and small irrigation systems, and with operating and maintaining large "national" systems. NIA has become well known in recent years for its innovative experimental programs for promoting farmer participation through strong farmer organizations. NIA began experimenting with participatory methods for building and improving smaller farmer-owned irrigation systems--called "communals"--in the late 1970s. This program has been well-described by the former Assistant Administrator for Operations in NIA who was largely responsible for its planning and implementation, Benjamin U Bagadion, and his colleague from the Ford Foundation, Frances F. Korten (Bagadion 1985; Bagadion and Korten 1985; Korten 1982).

In recent years NIA has given increasing attention to organizing farmers on the larger systems that it manages, the "national systems." Generally, there are three types of farmer involvement in national systems. In the first type, farmer organizations contract with NIA to take responsibility for maintaining agreed lengths of canal. In the second type, the irrigation association takes over responsibility for operation as well as maintenance of agreed sectors of the system and also collects irrigation fees to be remitted to NIA. In the third type, the objective is to have the association take over the entire operation and maintenance of systems--in effect to convert them from national to communal systems (Bagadion 1985). Most of these efforts to involve farmer organizations in management of national systems are at an early stage of development.

In the communals and on the national systems the method used for developing strong farmers' associations that has been reported to date is through the use of specially trained "catalysts" called Community Organizers (CO). COs have proven quite effective at assisting farmers to develop strong associations--so much so that at least two other countries, Sri Lanka and Indonesia, have borrowed and adapted the idea. In this report, Mr Bautista reports on a similar but less intensive methodology that makes use of graduates in agriculture, called Irrigators Associations Advisors, (IAA) to promote farmers' associations. These Advisors are not called COs, and their job is defined to include providing considerable agricultural advice as well as assisting farmers to organize.

Despite the difference in intensity of organizational effort, and different terminology (CO versus Irrigation Advisor), both share a number of key characteristics that explain their relative success. These factors have been identified by Uphoff et al. (1985) and others, and the present case study provides further independent confirmation. A few key factors are:

1. Strong support from top levels of the government and agency. NIA Administrators have provided consistent and strong support for farmer participation through organizations. Undoubtedly a key reason for this is that NIA must recover O & M costs, and over the long term, capital costs, of irrigation systems from the users. Improving irrigation service, and developing strong associations that could work in partnership with NIA were seen as essential in order to improve the rate of fee collection.

2. Experimentation, phasing, and flexibility, rather than rigid "blueprint" approaches, are essential. There must be a conscious process of learning from the project over time, and a capacity for making changes as lessons are learned (Uphoff et al. 1985). As Bagadion (1985) notes, too, NIA itself had to make changes in order to develop its capacity to respond to farmers. A participatory mode of operation within the agency is also important, as Mr Bautista's discussion of the Agricultural Development Coordinating Council confirms.

3. Building from below, using base-level groups, existing ones if possible, to build upward rather than following the conventional strategy of simply calling large meetings to select officers and ratify a constitution. On this point, Bagadion (1985) notes that farmers' participation must be *organized* to make it effective and sustainable. Such organizations should follow hydrological lines. Having legal authorization is important as long as the legislation supports entities having their own reality; legal support is no substitute for or guarantee of legitimacy and status.

Mr Bautista's report on his experiences in MRMP is quite concrete and sometimes frank in its details on problems faced, and solutions attempted. These kinds of details are often absent from reports written by researchers (which tend to be more analytical and abstract). This report should be very useful to irrigation management practitioners, his primary audience, but it also provides important data for researchers interested in doing comparative analyses. To my knowledge, Mr Bautista did not derive the design of the program from books and researchers' reports, but rather from his own experiences and understandings of what might work under the circumstances. Yet his experience tends to confirm many of the conclusions researchers have also reached, while adding new insights.

Mr Bautista is the first recipient of an IIMI *Special Award.* Under the Special Awards program, IIMI seeks to identify irrigation professionals who have tried innovative approaches for improving the performance of irrigation systems. The program is designed to provide an opportunity for such professionals to document their innovations for enhanced system performance and to publish these as a case study. IIMI provides award recipients with substantive and editorial support required to accomplish these ends. I am sure Mr Bautista has gotton IIMI's special Awards Program off to an excellent start.

Mr Bautista is a man who has had years of experience in promoting agricultural development in The Philippines. It is significant that he began his career as a teacher of vocational agriculture, and moved up to being principal, and later held responsible positions in several special programs to promote food grain production. He has been Manager of the Agricultural Development Division of MRMP since 1976, with responsibility for promoting agricultural production in the second largest irrigation project in the Philippines.

To keep the cost and size of this publication within bounds, IIMI has chosen not to include a number of key documents as Appendices. These are copies of the types of contracts between NIA and Irrigators Associations, constitutions of Associations, membership agreements signed by members of Farmers Irrigators Groups, etc. IIMI has these on file in its library, and will be glad to send copies to persons who believe they could make good use of them.

Douglas J Merrey
Digana Village, Sri Lanka
22 November 1986

EXECUTIVE SUMMARY

Most water users associations organized in large systems are found only at the turnout level. Few irrigation system managers have ventured to organize water users associations above the turnout level. As a result, farmers are seldom given the opportunity to participate in the preparation of water delivery schedules, cropping calendars, collection of service fees and in the operation and maintenance of irrigation facilities in the sub-lateral and lateral canals.

At the Magat River Multipurpose Project (MRMP), the Agricultural Development Division started organizing Rotational Unit Groups and Farmers Irrigators Groups at the turnout in 1976 to ensure farmers' participation in the equitable distribution of water and maintenance of irrigation facilities. In 1980, 23 Irrigators Associations (IAs) were organized in the sub-lateral and lateral canals to see if formal farmers' groups can assist in the cleaning and minor maintenance work of larger irrigation canals and in collection of irrigation service fees. What happened in the succeeding years was beyond expectations. The number of IAs grew from 23 in 1980 to 240 in 1986 with 20,198 members cultivating 40,766 ha of rice land. Nearly 60% of these IAs now maintain about 600 km of irrigation canals and assist the National Irrigation Administration officials in the collection of irrigation service fees.

With this initial success, the ADD, with the cooperation of the Operation and Maintenance personnel, organized IA Irrigation Committees on large lateral canals and Federations of Irrigators Associations in each of the four irrigation districts so the IAs could also participate in the preparation of irrigation delivery schedules and cropping calendars. The Presidents of the four federations were invited to sit as regular members of the Agricultural Development Coordinating Council to represent the interests of the farmers in the formulation of solutions to existing problems.

The success in organizing water users associations in the MRMP service area can be attributed to any or all of the following:

1. *The strong determination and dedication of the ADD personnel to demonstrate exceptional accomplishments.*

   NIA started hiring agriculturalists during the early part of the 1970s in compliance with the loan agreements to strengthen its operation and maintenance staff. While the ADD personnel in other large irrigation projects confined themselves to organizing water users associations on the farm level, the ADD personnel of MRMP went on to organize formal water users associations in sub-lateral and lateral canals up to the district level. They demonstrated a capability to organize farmers' groups that would participate in the allocation and distribution of water, maintenance of irrigation canals, collection of irrigation service fees, and the preparation of irrigation delivery schedules and cropping calendar;

2. *Farmers' problems regarding the timely delivery of water during Project construction.*

   Farmers' problems during project construction were numerous. Those that followed the cropping calendar had their crops flowering during the cold months of December and January, while those that delayed their planting time suffered from water shortage. Both resulted in low yields. Coupled with low farmgate prices during the harvest season and reduced cropping intensity, most of them were not able to pay their loans in full, thus depriving them of getting succeeding loans. The farmers and the members of the ADCC realized that the best solution to this problem was the organization of formal Water Users Associations; and

3. *The strong support for the program by the Project Manager and other top officials of the agency, particularly, the NIA Administrators.*

In compliance with the new policy on irrigation by the Government of the Philippines, NIA launched a *"System Viability Program"* in 1979. The program stipulated that each irrigation system must be able to earn its cost of operation and maintenance and to also save some amount to pay back the cost of construction within a period of 50 years from project completion. The new program prompted the Project Manager and other NIA top officials to give full support to the IA Organization and Development Program of MRMP.

Today, MRMP has had ten years of experience in organizing water users associations at the turnout and more than five years in organizing IAs in lateral and sub-lateral canals. From this experience we can conclude the following:

1. Continuing education is indispensable to develop or maintain these associations until the IAs can stand on their own.

2. Additional duties and responsibilities with corresponding authority and incentives will facilitate the development of the associations and the organization of more IAs at MRMP.

3. Group exercises are indispensable for IA organizational development. These exercises must give immediate and tangible benefits to the members. One of the most effective group exercises at MRMP is the Lateral Turnover Program where the participating IAs are paid for monthly cleaning and maintenance of lateral canals. Through this program MRMP is saving about ₱900,000 (US$ 45,000) annually in maintenance costs. IAs also receive collection incentive fees of 2.5% for 75% payment of irrigation service fees and 3% for 100% payment. Other group activities include the negotiation of production loans, group purchase of farm inputs, and marketing of farm produce.

4. Proper management of funds, regardless of the amount, is important to a strong IA. To do this, all IAs are required to deposit their earnings in a bank before spending any amount. All expenditure must be based on an approved budget and the annual budget must be approved at a general assembly meeting to safeguard IA funds.

5. Active members are indispensable. The conventional practice of many farmer organizations where officers are the only ones participating in the discussion of issues is wrong and must be corrected in order to erase the notion that the members know nothing and are inactive.

6. Village chiefs often do not perform well as IA Presidents. In places where a canal serves more than one village, village chiefs who act as IA Presidents are often suspected of favoring members from their villages. Hence it should be avoided.

7. Inter-agency coordination is easier with strong IAs. Once the IA representatives are allowed to sit as members of the council or committee to represent the interests of the farmers, the work of the coordinator becomes easier because communication between the different agencies and the farmers is direct.

8. Understanding and full support of the IAs by operation and maintenance personnel is indispensable during and after the organizational phases because the key that holds people together in this association is *water*.

INTRODUCTION

Formally organized water users' associations can play an important role in improving the efficiency of irrigation systems, and even in the construction of small irrigation projects. In places where irrigation project management has strong support from other private and government agencies, formally organized water users' associations can also play an important role in increasing production and income of the farmers by policing their ranks for the proper management of production loans and marketing of farm products.

In 1977, a new general policy on irrigation was promulgated in the Philippines. The policy stipulated that the Government would bear the interest on the cost of construction of national and communal irrigation systems that it constructs and improves, and the water users would bear the cost of operation and maintenance and pay back the cost of construction and improvement within 50 years (Bagadion 1985). To comply with the new policy, NIA launched a program in 1979 to organize Irrigators Associations (IAs) in small national and communal irrigation systems to enhance farmers' participation in the design, construction, operation and maintenance of these systems. However, NIA did not attempt to implement similar programs in large systems above the turnout level like the Upper Pampanga River Project (UPRP) and Magat River Multipurpose Project (MRMP), until the Agricultural Development Division of MRMP, started organizing 21 pilot IAs in the last quarter of 1980.

The number of IAs in this project increased every year and in April 1986, a total of 240 IAs had been organized with 20,198 members cultivating 40,766 ha. The area these IAs now cover represents about 42% of the project service area of 97,400 ha. One hundred and thirty eight of these participate in the clearing and maintenance of 564 km of irrigation canals through "Lateral Turnover Program Agreements" with the NIA. Under this program, the participating IAs carry out normal channel maintenance and are reimbursed by NIA for their labor at a standard rate of ₱600.00[1] per 3.5 km Ditchtender Section, per month. The IAs also assist in the collection of irrigation service fees from their members whereby a collection incentive fee of 2.5% is given to an IA that pays 75% or more of the total owed to NIA, and 3% to those that pay 100%. All of the 240 IAs also participate with four agro-chemical companies in the establishment of Demonstration Farms in their respective areas. Some have special links with farm-input dealers for the group-purchase of fertilizers and pesticides, while others have links with agencies for production loans and marketing of farm produce.

The experience and observations of people involved in the organization and development of the IAs at MRMP are discussed in this report. The author spearheaded the preparation and implementation of the program for IA organization in MRMP. This report describes the problems that prompted the members of the Agricultural Development Coordinating Council of the project to propose the organization of IAs in every lateral canal, the series of group exercises that were introduced to enhance the development of group discipline for water management and procurement of other services, and the problems met and solutions developed by the implementing agency during the process of organizing and developing IAs. It also discusses the impact of ambiguous policies on the organization of IAs in large systems, and a proposal for rectifying some of the remaining problems. It is hoped that this report will be helpful to those who are considering organizing IAs in large systems.

---

[1] The exchange rate of the peso has varied from about ₱9.00 - US$ 1.00 in 1980, to about ₱20.00 - US$ 1.00 in 1985-86.

BACKGROUND

The Magat River Multipurpose Project (MRMP) feasibility report proposed a storage dam on the river to provide year-round irrigation to 104,000 ha and installation of a hydroelectric plant with a capacity of 300 MW. The irrigation component consisted of expansion and upgrading of the existing Magat (MARIS) and Siffu River Irrigation System (SIFRIS). In 1973, NIA initiated work on the Angat-Magat Integrated Agricultural Development Project (AMIADP), which included provision for the rehabilitation and expansion of the existing MARIS to a total of 40,000 ha. The project is located in the province of Isabela in Cagayan Valley of Northern Luzon which now exports 65% of its produce to Metro-Manila, Central Luzon, Southern Luzon, and some Northern Luzon towns and cities. (See Map 1.)

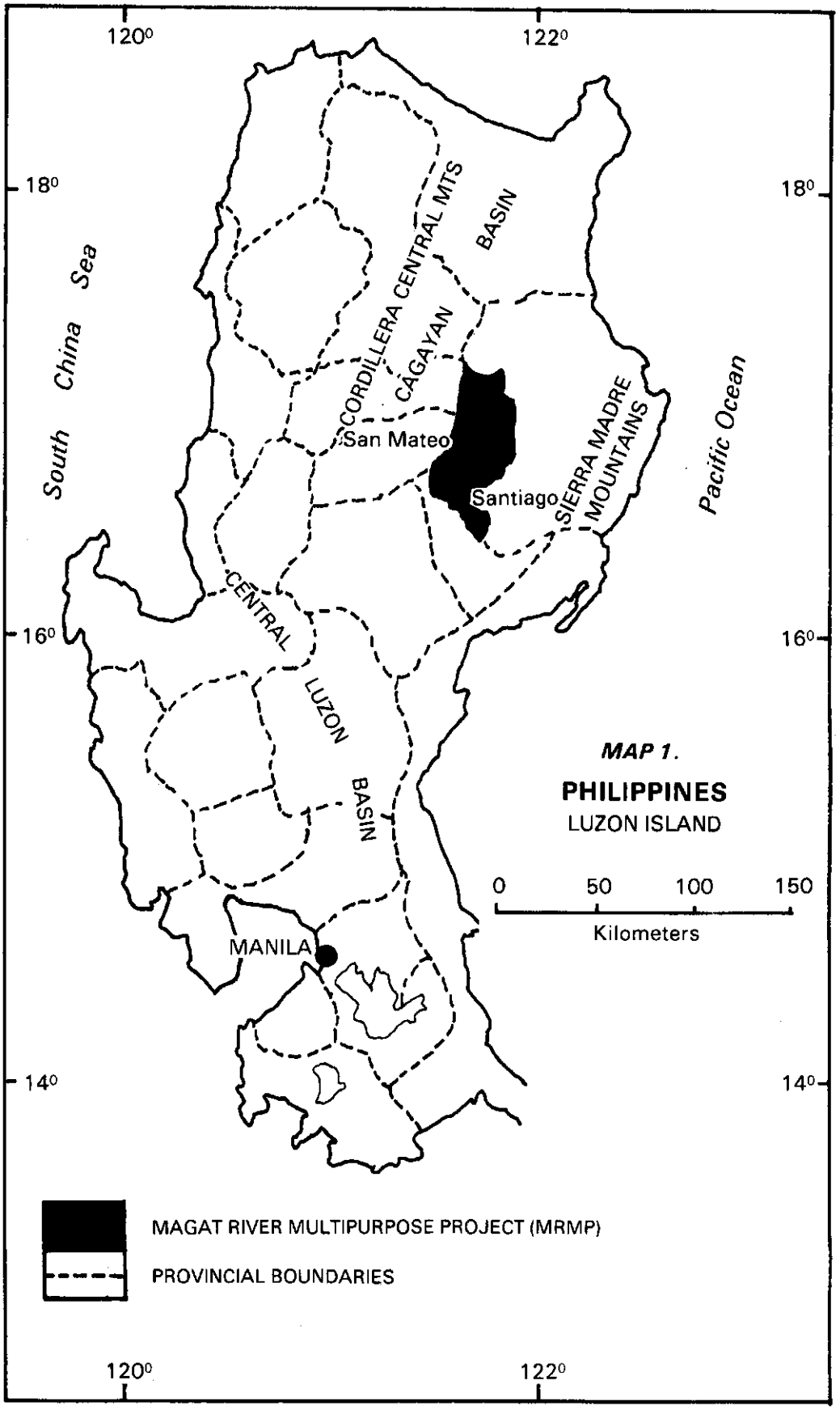
The climate in the project area is tropical and monsoonal. Warm temperatures throughout the year allow a twelve-month growing season for irrigated rice. About 75% of the average rainfall of 1,900 mm falls in the six-month period from July to December, with the peak in November. Over a 23 year period between 1948 to 1970, the area was hit by an annual average of 3.2 typhoons, with the highest frequency between July and November. The adverse effect of these typhoons on the rice crop must be considered in preparing the cropping calendar for the project. It is also necessary to involve the Farmers' Groups in the preparation and implementation of this calendar.

Surveys during the project planning phase showed that approximately 32,000 farm families (nearly 200,000 people) resided in the project area. The mean farm size was 3.1 ha in Stage I, and 3.4 ha in Stage II. However, there was a high degree of variation from the mean, especially in the Stage II area, which was less developed, largely rainfed, and of lower population density. In the early years, about half the farmers were owners and the rest tenants: However, implementation of land reform and further subdivision of land due to population growth have reduced the disparities in holding size and between owners and tenants. The pattern of land ownership did not appear to have a significant impact on the program to organize farmers, though no detailed investigation has been made on this question.

In view of the large physical size, high estimated cost, and long construction period for the project, a 10-year implementation schedule (1976-1985) was proposed. Stage I consisted of the rehabilitation of the existing systems and construction of new facilities to include a total of 75,000 ha that could be served by the run-of-the-river diversion during the wet season. This stage took five years (1976-1980) and was subdivided into two stages. Stage IA covered 40,000 ha of MARIS that was rehabilitated and upgraded with ADB assistance, and stage IB consisted of 35,000 ha that was rehabilitated and expanded with World Bank assistance. Stage II took seven years (1979-1985) and was also subdivided into two stages. Stage IIA included construction of additional irrigation facilities to increase the service area to 104,000 ha and the construction of a storage dam. Stage IIB consisted of the provision and installation of generating facilities, power lines, and substations.

Construction was scheduled during the dry season, to permit the farmers to plant rice during the wet season using the run-of-the-river diversion. Before the project, farmers generally transplanted their crops in December to avoid the adverse effect of cool temperatures in December and January. But during the project the farmers had to transplant their rice seedlings on or before the first week of November to conform with the construction schedules. Full cooperation of strong Farmers Groups was needed to implement this schedule.

Several intensified rural and agricultural development programs, the Rice Production Program, Land Reform Program, and Cooperative Development Program, were launched by the Government of the Philippines to attain self-sufficiency in rice production and to improve the living conditions of the rural poor. Each of these programs attempted to organize farmers' groups/associations to enhance farmers' participation in implementation, there-by ensuring success.


120°
122°
18°
16°
14°
South China Sea
Pacific Ocean
CORDILLERA CENTRAL MTS
CAGAYAN BASIN
SIERRA MADRE MOUNTAINS
San Mateo
Santiago
CENTRAL LUZON BASIN
MANILA
MAP 1.
PHILIPPINES
LUZON ISLAND
0 50 100 150
Kilometers
MAGAT RIVER MULTIPURPOSE PROJECT (MRMP)
PROVINCIAL BOUNDARIES

When the International Rice Research Institute (IRRI) at Los Banos, Laguna, Philippines released the first non-seasonal variety of rice (IR-8) in 1967, the Government launched its intensified Rice Production Program (locally known as the Masagana 99) in 1968. The Ministry of Agriculture began organizing a type of farmers' group called *"M-99 SELDA."* The Selda is a group of farmers with 5-15 members that is used as a channel for the release of supervised production credit to bonafide farmers without collateral. The group is responsible for the proper utilization of the loan and its repayment. The failure of any member to pay his obligation on time is sufficient ground for a bank to disapprove the applications for loans of all other members for the succeeding crop season. But due to poor discipline within the farmer groups, non-farmers were able to borrow loans, borrowers inflated the price of their farms to get bigger loans, and others sold their fertilizers and pesticides at prices much lower than the prevailing price instead of applying them to their farms. This resulted in non-payment of production loans and eventual closure of most of the banks that entered the Masagana 99 Program. Farmers were then forced to borrow money from informal sources (private money lenders) at usurious interest rates (30-40 % per crop season).

The Government of the Philippines, through the Agricultural Credit Administration, also launched a Farmers Cooperative Development Program in the 1960s to solve the farmers' problems in marketing farm produce. Fourteen Farmers Cooperative Marketing Associations were established in the province of Isabela. Today none of these is operating. The facilities were all sold to private operators.

This was followed by another intensive program for cooperative development in 1973 through the Ministry of Local Government and Community Development in support of the 1972 Land Reform Program. The strategy was to organize pre-cooperative organizations (Samahang Nayan) in the villages and then to organize a farmers' cooperative (Kilusang Bayan) in the towns. This program also failed to accomplish its mission, because of funding and management problems.

To ensure the success of the Land Reform Program, the Ministry of Agrarian Reforms established the Agrarian Reform Beneficiary Associations (ARBA) in 1972. ARBAs were organized to facilitate the extension of production credit and technical assistance from the Land Bank of the Philippines (LBP) to land reform beneficiaries and to ensure the prompt payment of land amortizations. But these associations also did not work satisfactorily. Few paid their production loans and payments for land amortization remained low.

In 1973, NIA initiated work on the Angat-Magat Integrated Agricultural Development Project which included provision for the rehabilitation and up-grading of the existing MARIS to 40,000 ha. When MRMP started its construction work in January 1976, a total of 678 Compact Farms Associations (CFA) at the turnout level had already been established in 24,666 ha of the newly rehabilitated area (Table 1). Most of the CFAs were actively involved in the equitable distribution of irrigation water and maintenance of irrigation facilities at the farm level. Some of them had developed access to production credit. Since 1977, CPAs have been called Farmers Irrigators Groups (FIG), but their functions remain the same.

MRMP started hiring the key personnel for its Agricultural Development Division in the last quarter of 1975 to prepare the programs for the organization of Farmers Irrigators Groups, water management studies, monitoring and evaluation, and training of Water Management Technicians and farmer-leaders. Those hired held senior positions with different government agencies in Cagayan Valley. They transferred to MRMP because of attractive salaries and other benefits.

Table 1,**STATUS OF FIG ORGANIZATION AT MRMP SERVICE AREA 1974 TO 1986**

Year	No. of FIG Cumulative	No. of Members Cumulative	Area Covered Cumulative (ha)
1974*	214	3,275	6,772
75*	671	12,086	24,666
76*	954	16,608	34,110
77	1,053	17,823	36,945
78	1,189	20,665	41,831
79	1,501	24,410	48,668
80	1,589	33,539	51,982
81	1,672	35,298	54,873
82	1,828	36,851	60,143
83	2,028	38,451	66,148
84	2,286	40,773	74,869
85	2,580	32,125	83,204
86	2,631	43,978	85,694

Note: 1974 and 1975 are accomplishments of AMIADP.

*During 1974-76 these groups were called CFA.

The project established an Agricultural Development Coordinating Council (ADCC) in 1976 to satisfy the loan requirements. This is composed of provincial chiefs of departments and organizations (public and private) that render service for the development of agriculture. The ADCC is both a policy-making and an implementing body. Since 1976, it has met every second Tuesday of each month to discuss problems encountered by the farmers and its members in delivering agricultural support services. Problems that cannot be solved at the project level are elevated to the National ADCC. This council is chaired by the Project Manager, with the Provincial Governor of Isabela as Honorary Chairman. The Manager of the ADD was designated as its Executive Secretary.

PROJECT GOALS AND OBJECTIVES

The Philippine Government intensified the implementation of its irrigation development program in the 1970s, to attain self-sufficiency in rice. To support the program, the Government borrowed money from international financing institutions such as the World Bank, Asian Development Bank, and International Fund for Agricultural Development. It was also borrowing funds from other countries. To ensure success NIA was authorized to hire graduates holding a Bachelor of Science in Agriculture to organize informal Farmer Irrigators' Groups (FIGs) and train their leaders. It was also authorized to employ one agriculturalist as Water Management Technician (WMT) for every 500 ha to improve the capability of its water management staff.

MRMP is one of the projects that was included in the intensified irrigation development program. To justify its huge cost, the irrigation aspect of the project was required to attain a 200% rice cropping intensity within five years after project completion; to increase the average yield from 2.7 tons of paddy per ha to 4.2 tons per ha per crop season; and to increase the net income of the farmer beneficiaries during the same period. To date land development is incomplete. The project has achieved 164% cropping intensity, and an average of 3.7 tons of paddy per ha per season. Although income in pesos has improved, after inflation there is little improvement in real income.

The original objective of the project in regard to farmers' groups was only to organize and develop FIGs that would manage the equitable distribution of water on the farm level and maintain the farmer level irrigation facilities. To use the FIGs as channels for production loans without collateral, technical assistance and marketing assistance was not considered because there were other farmers' organizations designed for this purpose. However, this limited objective was revised when the members of the ADCC discovered that the other farmers' associations were not functioning well, principally due to lack of cooperative or group discipline. The revised objective called for the organization of a larger type of multipurpose irrigation-based farmers' association.

ORGANIZATION OF FARMERS' IRRIGATORS GROUPS (FIGs)

Within the MRMP management structure, one of the support divisions is called the Agricultural Development Division (ADD) (See Figure 1). This is the only staff division having direct implementation responsibilities. Under it are three sections namely: 1) the Land Use and Water Management Section (LUWMS),2) the Evaluation and Statistics Section, and 3) the Farmers Assistance and Training Section (FATS).

The Land Use and Water Management Section is responsible for conducting water management studies to establish the water management parameters of the service area and conducting fertilizer trails in cooperation with selected FIGs. It also provides resource speakers for training sessions of Water Management Technicians and FIG Officers.

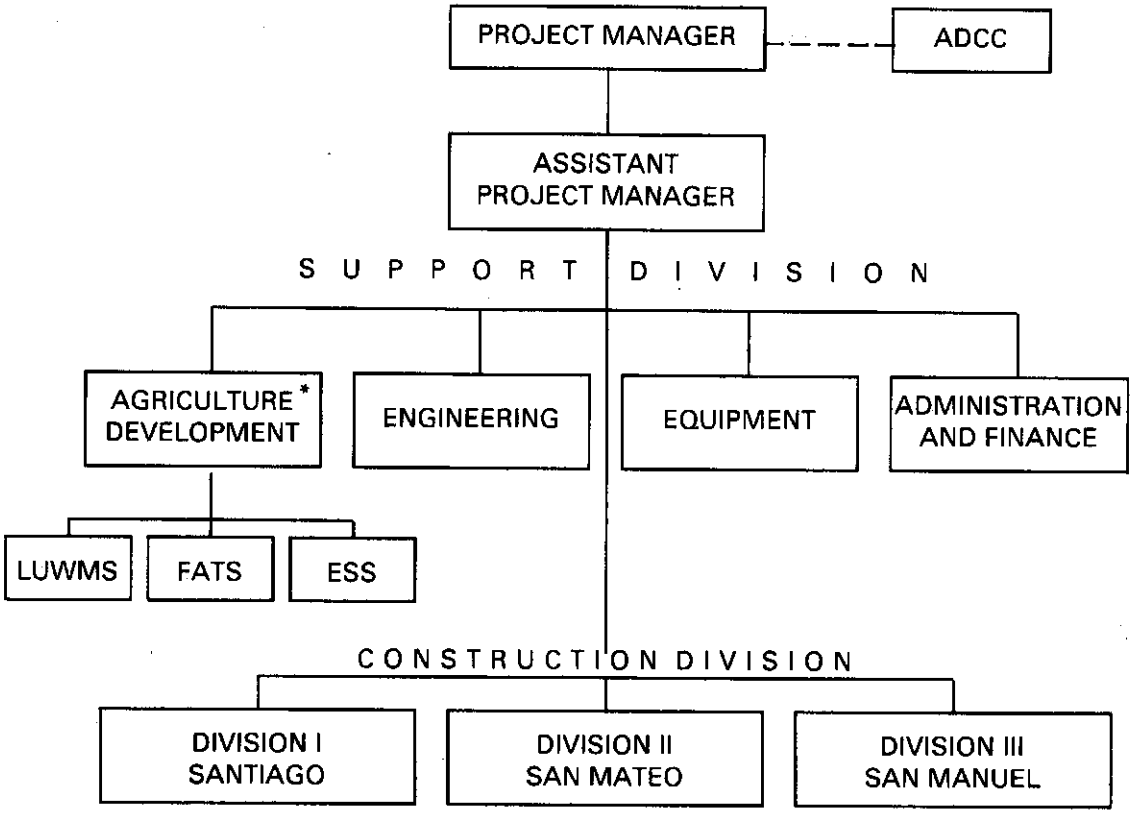
Agricultural development information must be collected periodically through farmer and institutional surveys. These must be compiled, analyzed and interpreted. Results of the analysis must be distributed to the members of the Agricultural Development Coordinating Council (ADCC) so it can be discussed during monthly meetings. These responsibilities belong to the Evaluation and Statistics Section (ESS).

On the other land, the Farmers Assistance and Training Section (FATS) is mainly responsible for organizing Rotational Unit Groups (RUGs), FIGs and training of the officers and members. FATs is also responsible for the preparation and implementation of training programs for Water Management Technicians to develop their capabilities in allocating and delivering water to the FIGs. They also answer technical questions in rice production when asked by farmer-cooperators during FIG meetings whenever representatives of the concerned agencies are not available.

The irrigation facilities of MRMP were designed for rotational irrigation (See Figure 2). Farm level turnouts are double-gated and serve as measuring devices for irrigation water. Cross sections of the Main Farm Ditch (MFD) and Supplementary Farm Ditches (SFD) are the same. These are provided with division boxes and end checks. The service area of the turnouts (rotational area) ranges from 30 to 50 ha. The rotational areas are subdivided into rotational units of about 7 to 10 ha each. Farmers in the small rotational units are organized into informal associations called RUGs. The larger rotational areas are organized into FIGs. The members of the RUG elect a unit leader. The unit leader allocates and distributes water to the members and supervises the maintenance of their supplementary farm ditch. The FIG includes a chairman, all RUG leaders, and a common irrigator. The chairman is selected from among the rotational unit leaders in the FIG, while the common irrigator is usually appointed by the chairman. Water is allocated and distributed by the common irrigator to the rotational units under the supervision of the chairman. The FIG chairman also supervises the repair and maintenance of farm level irrigation facilities with the assistance of the RUG leaders.

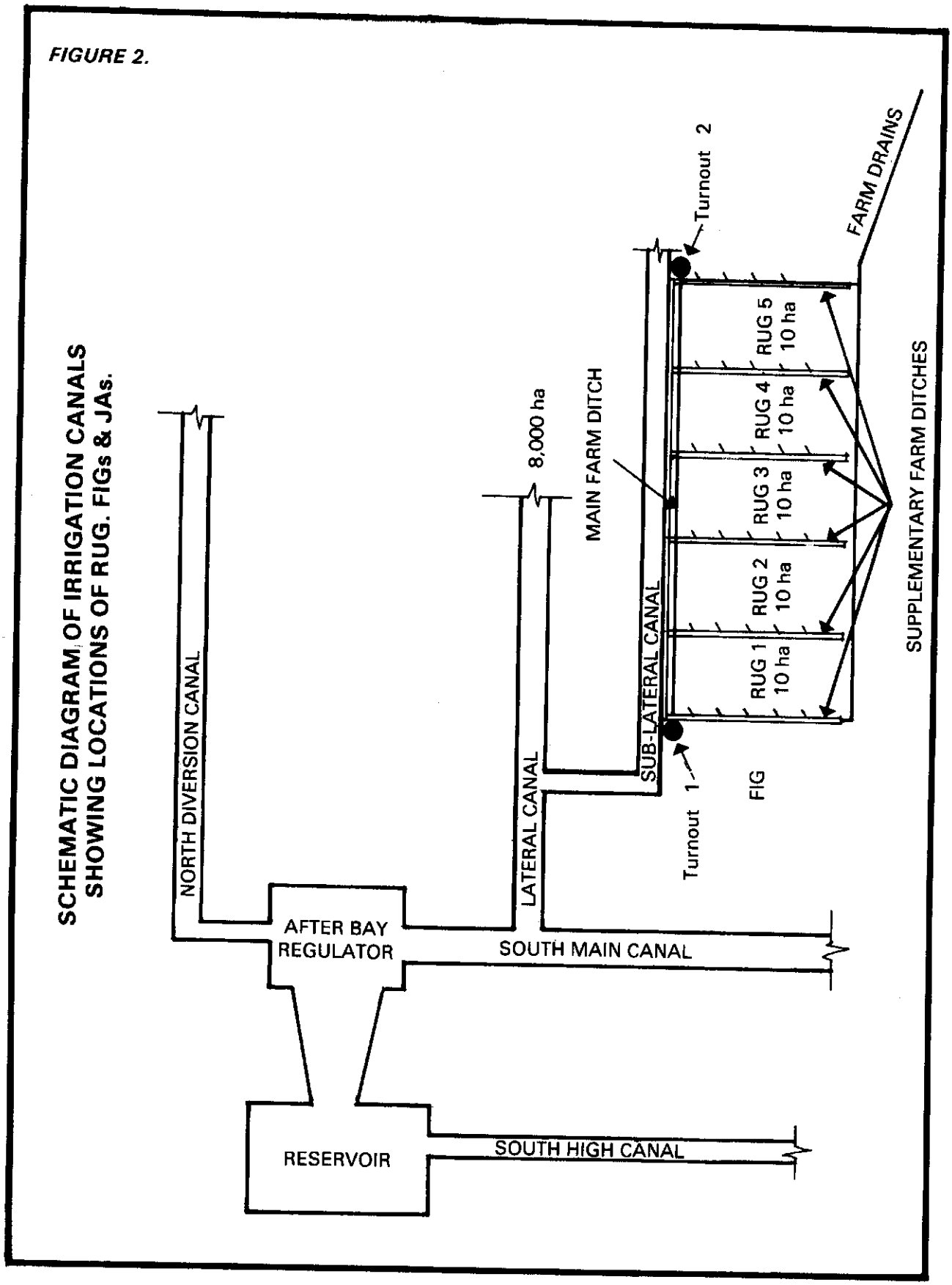
FIGURE 1

MRMP
ORGANIZATION CHART FOR PROJECT CONSTRUCTION
1976 - 1985



* The only support division with line function.

FIGURE 2.


SCHEMATIC DIAGRAM OF IRRIGATION CANALS
SHOWING LOCATIONS OF RUG. FIGs & JAs.
NORTH DIVERSION CANAL
AFTER BAY
REGULATOR
LATERAL CANAL
8,000 ha
MAIN FARM DITCH
SUB-LATERAL CANAL
Turnout 2
FARM DRAINS
RUG 5
10 ha
RUG 4
10 ha
RUG 3
10 ha
RUG 2
10 ha
RUG 1
10 ha
SUPPLEMENTARY FARM DITCHES
Turnout 1
FIG
SOUTH MAIN CANAL
RESERVOIR
SOUTH HIGH CANAL

By 1977, a total of 1,053 CPAs/FIGs had been organized. To determine how many of these associations were active and viable, an evaluation on a sample basis was conducted by the Evaluation and Statistics Section of the ADD. Only 50% passed, in the sense of fulfilling all their functions adequately. These functions include:

1. Major

a) proper repair and maintenance of irrigation facilities, b) equitable distribution of water, c) attendance at meetings is not less than 75%, d) convene regular meetings (officers and General Assembly), and e) payment of irrigation service fees.

2. Minor

a) adequate record keeping, b) group marketing of produce, c) group purchase of farm inputs, d) 100% use of high yielding varieties, and e) correct maintenance of paddy dike spillways/openings.

Another evaluation survey was conducted in 1979 of the 1,501 FIGs which had been formed by that time. The percentage of viable FIGs had decreased further to 46%. Repayment of Masagana 99 production loans was very low. The majority of the 16 banks that catered to Masagana 99 borrowers had closed their windows due to heavy past dues. A majority (75%) of the farmer-beneficiaries were complaining of the usurious interest rates (30 to 40% per crop season) that the informal money lenders were charging them. On the other hand, the bank managers were complaining of borrowers that were not bonafide farmers; of inflated areas; of borrowers reselling the farm inputs that they purchased through the use of chits due to lack of supervision of borrowers; and of the ineffectiveness of the Masagana 99 "Selda" as a channel of supervised farm credit. Some farmers were complaining of water shortage during the dry season while the others complained about harvesting, threshing and drying during the wet season. Most were also complaining about the poor marketing support of the Government to the farmers. These problems were presented to the members of the Agricultural Development Coordinating Council during one of its regular monthly meetings. As a result, the Chairman announced a special meeting to further discuss and analyze the prevailing situation.

THE SPECIAL MEETING OF THE ADCC IN 1980

As noted above, one of the provisions in the loan agreement called for organizing an Agricultural Development Coordinating Council (ADCC) to promote inter-agency coordination in the timely delivery of the necessary agricultural support services to farmer-beneficiaries. The ADCC of MRMP was organized in 1976 with 15 chief provincial officers of different agencies (public and private) engaged in the rice production program as members. In 1985, the membership was increased to 19 to include the 4 Presidents of the District Federations of Irrigators Associations (see below, section VII) as regular members to represent the farmers of MRMP. Although the registered members are only 19, an average of more than 30 people always attend the monthly meetings to listen to the discussions of important issues on rice production. According to those interviewed, the ADCC is the only council in the province and in the region where members discuss issues intensively and intelligently, where members can argue during discussions of critical issues and always end with a common agreement in solving their problems.

The council maintains the Project Manager and the Manager of the Agricultural Development Division as its permanent Chairman and Executive Secretary respectively. It meets regularly every second Tuesday of each month from 10.00 am to 4.00 pm, to discuss problems confronting both farmers and council members in the implementation of the rice production program and other

agricultural crop production programs. If time does not permit the formulation of recommendations that will solve the current problems, a special meeting is usually called by the chairman. In cases such as these however, the chairman always sees to it that a committee of at least three members is created to prepare and submit proposals to solve the problem or problems. The project pays each ADCC member an honorarium of 50 pesos per meeting, and provides lunch and snacks.

Periodic monitoring and evaluation reports of the different programs are a regular feature on the agenda. The Evaluation and Statistics Section of the ADD is mandated to submit these reports once a week before every meeting. These reports, together with the minutes of the previous meetings, are distributed to members at least three days before the meeting to provide enough time to go over it and verify the monitoring and evaluation findings if necessary.

Every effort is made to ensure the Council reaches a consensus in important issues, and to avoid divisive conflict. For example, the Executive Secretary always consults with council members planning to speak before the meeting to discuss with him the background of the subject or issue, including results of monitoring surveys on the topic at hand. Through this, speakers are not caught flat-footed and harmonious discussions prevail during monthly meetings.

Every foreign assisted irrigation project in the Philippines is required to establish similar councils during project construction, but many have failed to carry out their purpose. Our experience at MRMP seems to show that the life of any council for irrigation development depends largely on the ability of the coordinator to understand the programs that are being implemented by its members. With this in mind, the coordinator will be in a better position to develop a comprehensive approach that the members can accept. The coordinator must maintain a low profile at all times, must be humble, must not be credit conscious, and should act as a shock absorber of the body.

The members of the Council recognized the handicaps of the Production Technicians of the Bureau of Agricultural Extension of the Ministry of Agriculture and Food in providing close supervision to borrowers of the Masagana 99 Program. They lacked the necessary logistical support for mobility and the number of farmers had significantly increased due to subdivision of farms. The Council members felt that the solution would be to create or strengthen well-disciplined farmers' groups whose members can police their own ranks, so the Production Technician would only contact the leaders and the leaders would be responsible for the behavior of their members. But this type of farmers' group could not be easily identified, so the Council created an ad-hoc committee to study the matter with the provincial chiefs of the Ministry of Local Government and Community Development, National Grains Authority, Philippine National Bank, Land Bank of the Philippines, Ministry of Agrarian Reform, Development Bank of the Philippines, Isabela Seed Growers Associations, Manila Electric Company Corporate Farming, Bayer Philippines, and NIA as members. This ad-hoc committee was given one week to develop and submit a proposal.

Several days before the ad-hoc committee members met, the Executive Secretary of the ADCC prepared the agenda for the meeting and discussed it with the members in their respective offices. After that he prepared a series of questions that would guide discussion during the meeting. He also prepared a set of criteria that could be used in judging the existing farmer organizations to find which among them would be most useful in solving water management and credit problems, facilitating supervision and technical assistance, and enhancing the development of group discipline.

The committee examined the characteristics of the following farmers' groups and associations: Samahang Nayon (SN), Masagana 99 Selda (M-99 Selda), Agrarian Reform Beneficiary

Associations (ARBA), Barangay Irrigation Service Associations (BISA), Barangay Farmers Associations (BFA), Compact Farms Associations (CFA), and FIGs, (CFAs and FIGs have the same functions and scopes) using the criteria stated in the previous paragraph.

The attention of the committee was focused on debt recovery because it posed a serious problem to Government agencies at that time. Farming activities were often delayed or improperly done because of problems with production loans. Because of this, the proper management of irrigation water was also neglected by the farmers. From among the seven types of groups, the FIG was chosen for further strengthening because of the following characteristics:

1. Every FIG is supported with a parcellary map or a turnout irrigation layout where the names of landowners, actual tillers, and size of farms are recorded;

2. The parcellary map also contains the locations and status of farm-level irrigation facilities;

3. The farms of the FIG members are adjacent to each other making supervision and inspection comparatively easy; and

4. The average size of any FIG service area ranges from 30-50 ha which would ease monitoring of farmers' activities.

However, the FIGs had two strong drawbacks. These were their small size and the absence of any legal basis. The committee therefore resolved to federate all the FIGs that draw water from the same lateral or sub-lateral canal and suggested that these be registered with the Philippine Securities and Exchange Commission (SEC) as Irrigators Associations (IA). Thus it should be noted that the program emphasizes building on existing farmers' organizations (FIGs) by federating them into larger groups.

THE TWENTY-ONE PILOT IAs

Another special meeting of the ADCC was called in April 1980 to discuss the output of the committee. All of the recommendations of the committee were unanimously approved. The Council agreed that the ADD of MRMP would organize 21 pilot IAs in 1980, none in 1981, and an unspecified number in 1982 depending on the capability of the organizers and the willingness of the farmer-beneficiaries. It was also emphasized that membership in the associations must be voluntary in nature. In this regard, the Manager of the ADD was requested to prepare the corresponding program of work and training programs for both organizers and farmer-leaders. He was also requested to prepare a Memorandum of Agreement which all members of the ADCC would sign to show their commitment to the program.

A core of seven agriculturalists were selected from the existing FIG organizers. Three were assigned to Division I and two each to Divisions II and III (See Figure 1). Those chosen were all graduates having a B.Sc. in Agriculture with varied major subjects. They were all sons or daughters of farmers. They all participated in preparation of the Program of Work and in preparation of the Training Program for farmer-leaders.

The Program of Work was approved by the ADCC with only minor corrections. All the members of the Council signed the Memorandum of Agreement. Training of IA organizations was initiated immediately to catch up with the schedule of the next crop season which was then fast approaching.

A five day workshop was held to train the organizers. In the first days, the importance of FIGs' participation in the preparation of the water delivery schedule, cropping calendar, and the allocation and distribution of water through the IAs were discussed in great detail. The organizers were also told that strong IAs can be used as a good foundation in organizing or revitalizing farmers' cooperatives in the future. Most of the trainers were experienced staff from the ADD. Some resource speakers were also provided by the Philippine National Bank, National Grains Authority, Isabela State University and agro-chemical companies. Besides water management, irrigated rice production, management of production credit, marketing of farm produce, organizational development, and systematic collection of irrigation service fees, the following were emphasized:

1. Selection of sites where water is a major problem and all FIGs are active;

2. Updating the parcellary maps;

3. Updating the master list of farmers;

4. Inventory of farm level facilities;

5. Identification of FIG Chairmen and rotational unit leaders;

6. Procedures on how to conduct the orientation class for prospective members;

7. Signing of the membership agreement by FIG members; and

8. Procedures for selecting the members of the Board of Directors and IA officers.

The original plan was to organize the IAs on lateral canals or sub-lateral canals where all the FIGs were found to be active. But this was not strictly followed because the organizers could not find laterals such that all laterals had active FIGs. Therefore, they went on to organize IAs on laterals even if only four adjacent FIGs were found active in a lateral of 10 to 15 FIGs. In most cases the active FIGs were located at the tail-end and midsections of irrigation canals.

With the assistance of the Operation and Maintenance personnel, the organizers updated the parcellary maps and farmer lists, and conducted inventories of the farm-level irrigation facilities. The officers of all concerned FIGs were later called to attend a four-day training program in the Special Project Integrated Training at the NIA, Echaque, Isabela, free of charge.They were even fetched by NIA vehicles from their homes and returned to their homes after the training session. At the end of the training period, the officers were asked to submit their schedules for general assembly meetings of prospective IA members, to enable follow-up by MRMP management.

Irrigation water management is the most basic function of the IA. Therefore, it was felt that each FIG should be well represented in the organization. All chairmen of the active FIGs were therefore made mandatory members of the IA Board of Directors. The members of the Board then elected from among themselves the President, Vice President, Secretary, Treasurer and Auditor of the IA.

It was felt that the Board of Directors should include at least seven persons to develop more farmer-leaders. In cases where the number of FIGs in a prospective IA is less than seven, additional Board Members are elected from among the different *Rotational Unit Leaders.* It was however always emphasized that additional members must come from FIGs to which it is difficult to deliver water. The number of members of the Board of Directors should correspond with the number of FIGs that are active in the IA.

Ratification of the By-Laws and Articles of Incorporation is always done at a general assembly meeting where every item is fully explained. After collecting the necessary membership fees of five pesos from each member, the papers are submitted by the IA President or his representative to the SEC in Manila, as a non-profit and non-stock Corporation.

MRMP Management recognized that the procedures for registering the IAs with the SEC is time consuming and expensive, but also realized that it could be suspected of wrong doing if it took the work from the farmers. So, in registering the first five IAs, the project provided a vehicle and a guide. It took them four days to finish the job. This simple exercise made the five Presidents realize that the project office was really honest in helping them. Since then, the work of registering the succeeding IAs has been delegated to the project and the ADD has assigned one of its personnel to do the work. Each of the concerned IAs gave an extra amount of ₱50.00 to the ADD personnel assigned to register the IAs with the SEC for pocket money to cover miscellaneous expenses.

In the original plan, only 21 Pilot IAs were to be organized in 1980 and none in 1981, so the organizers would have enough time to observe what they have done and learn from their mistakes. But the pressures were so great that they were forced to accommodate two more IAs in 1980 and another nine in 1981.

The organizer, called an IA Advisor, is a multidisciplinary generalist, not a specialist. He attends all meetings of the Board of Directors of his IAs and also attends the general assembly meetings which are often held every other month. In most cases, these meetings are held on Saturdays and Sundays. Some are even called in the evening. His assistance is not limited to the organizational development of the IAs. He answers questions of farmer-members pertaining to water management, plant pests, and disease control, production loans, marketing of farm produce, etc., if the responsible officials are not around. If he did not do these things, he would lose the trust and confidence of his cooperators.

At the end of the first crop season in 1981, all IA advisors and IA officers were called to attend a 3-day Seminar/Workshop at the Special Project Integrated Training Center of MRMP. They presented their accomplishments, problems and how those were solved, and their recommendtions to improve the program. Some of the most important results of the workshop follow.

Production credit. More than 75% of the members had been borrowing production loans from informal sources at 30 to 40% interest per crop season due to unsettled accounts with the banks of the Masagana 99 Program. Officers of at least 10 IAs were reported to have contacted the managers of the banks and promised to settle some of their accounts in preparation for the next rice crop. Aside from this, they also told the other participants that the bank managers and the Production Technicians of the Bureau of Agricultural Extension had agreed to their suggestion for strengthening the Masagana 99 selda by ensuring that the future members of the selda are FIG members whose farms are adjacent to each other, to facilitate monitoring and supervision by IA officers and Government technicians. Other participants reported that the lists of IA members with outstanding Masagana 99 loans were about to be completed and would be ready before the next crop season. They included suggestions for revising the membership in the Masagana Selda.

Marketing of farm produce. During that time the farmgate price of paddy was low. Only NGA and the itinerant traders from Central and Southern Luzon provinces were giving fair prices. The seminar participants therefore requested MRMP to prepare a proposal for a marketing link-up between the IAs and NGA to be discussed with the NGA local representatives in their respective municipalities. They also agreed to pool all their marketable surplus in groups of 200 cavans every

harvesting season to take advantage of the good price offered by the itinerant traders. This proposal was implemented.

To assure 100% collection of Irrigation Service Fees (ISF) and production loans, some participants suggested that the collection process be tied to the release of irrigation water to the turnout and to the procurement scheme of paddy by the National Grains Authority. This would entitle the participating IAs to an ISF collection incentive of 3% from NIA and a Cooperative Incentive Fee of one cent per kilo or ₱0.50 per cavan of paddy from NGA.[2] To facilitate implementation, the officers of the IAs volunteered to use their own Inspectors/Collectors in assembling the payment in-kind in pre-arranged places so that NIA or NGA personnel could bring a vehicle to haul it away. It was also agreed that the whole procedure would be managed by the Finance and Development Committee of the concerned IAs.

Collection of irrigation service fees. The participants also proposed to pay their ISF obligations to MRMP by selling their produce to NGA. NGA would then pay NIA its ISF, together with the payment for production loans so they could save the cost of hauling. To pursue this course, the Operation and Maintenance Division of MRMP promised to distribute the bills at least one week before the start of harvesting in the concerned IA. However, this suggestion was not implemented because the procedures involved proved difficult to implement.

Exchange labor. The costs of labor for land preparation, transplanting, and harvesting were rising very fast and reducing the net income of the farmers. To remedy the situation, the participants agreed to promote the return of the traditional practice of *exchange labor.* They also felt the that the practice would help most of them keep abreast of the cropping calendar. No data are available on the impact of this agreement.

Procurement of farm inputs. The cost of fertilizers and pesticides was continuously going up during that time due to inflation and devaluation of the Philippine Peso, while the price of paddy remained the same because of Government price controls. To reduce the cost of farm inputs, the participants agreed to try to buy these through canvass-bidding. They planned to request the winning bidder to provide free delivery of the inputs to pre-arranged places. Five IAs with sufficient capital were able to implement this plan. In about 20 other IAs, small informal groups of members bought inputs together and obtained free delivery. Increased competition in recent years has led to reduced mark-ups on prices by local dealers.

Maintenance of irrigation facilities. Maintenance of farm-level irrigation facilities was not a great problem in the participating IAs because the officers were closely supervising the rotational unit leaders. In addition, their activities and accomplishments were monitored and evaluated by the members of the IA Board periodically. Some even practiced rotations of evaluators to avoid favoritism.

Capital build up. All of them favored the idea of raising funds for the association because they were convinced that an IA without funds could not last. The participants therefore promised to create income generating programs and the following were proposed: a) every member must deposit an amount equivalent to 13 kg of paddy every crop season; b) rebates from group purchase of farm inputs, land preparation done by contractors, threshing, and selling of paddy in groups must be divided into two parts -- one part would go to the association while the other would be kept by the concerned members; c) to collect fines from erring members, and from owners of water buffaloes caught wallowing in irrigation canals; d) incentives from the collection of irrigation service fees; and e) intensify marketing of paddy to NGA to get Cooperative Incentive Fees.

---

[2] One Cavan=50 kilos

The majority of these suggestions were implemented by the pilot IAs except for the proposal that each member should deposit the amount equivalent to 13 kgs of paddy every season, as shown in the reports of the monitoring and evaluation unit.

EXPANSION

In 1982, an extensive campaign was launched in which a total of 16 IA Advisors were involved. They were assisted by several selected and interested personnel of the O & M Division in the three field Divisions. The campaign was very successful. A total of 83 IAs was organized in 1982, 87 in 1983 and 58 in 1984, resulting in a total of 228 IAs organized from 1980 to 1984. To date (1986) a total of 240 IAs have been organized. They have 20,198 members cultivating 40,766 ha which is roughly equivalent to 42% of the MRMP service area (See Table 2).

***Table 2.*FIGs AND IAs ORGANIZED BY YEAR**

Year	FIGs		IAs	
	No: Cumulative	Area (ha.) Cumulative	No: Cumulative	Area (ha.) Cumulative
1974	214	3,275	-	-
1975	678	12,086	-	-
1976	954	16,608	-	-
1977	1,053	17,823	-	-
1978	1,189	20,665	-	-
1979	1,501	29,410	-	-
1980	1,589	33,539	23	3,100
1981	1,672	35,298	32	4,551
1982	1,828	26,851	83	12,614
1983	2,028	38,451	170	26,995
1984	2,286	40,773	228	37,785
1985	2,580	43,125	235	39,853
1986	2,631	43,978	240	40,766

NIA normally assigns one Ditchtender for every 3.5 km length of irigation canal. His duties are to maintain the cleanliness of the canal embankments, operate and maintain turnout gates, and collect irrigation service fees. MRMP has not hired additional Ditchtenders to clean canals in the expansion areas and has not hired replacements for those who retired. Instead, the project employs deserving IAs to do most of the work assigned to the ditchtender through lateral turnover contracts signed by the Presidents of the IAs and the NIA Project Manager. Nearly 58% (138) of the 240 IAs are now participating in the maintenance of about 564 km of irrigation canals through this "Lateral Turnover Program" with the NIA. Through this program, the IAs are given a source of income to generate funds and above all, a cooperative exercise ensues that can lead to the development of "Group Discipline."

Since the start of the Lateral Turnover Program in 1981, these IAs have collected a total amount of ₱1,810,530 from the NIA. This amount represents their remuneration for clearing canals. The money is deposited in the Philippine National Bank for their future needs, including the purchase of diesel fuel which is used to operate heavy equipment in the urgent repair and maintenance work of irrigation facilities.

These 138 IAs also participate in the collection of ISF. They get an incentive fee of 2.5% for a collection percentage of 75% or more and 3% for 100% collection. For the 1984-85 crop season, the three Irrigation Districts of the project have earmaked ₱134,632 for this incentive program. As the situation warrnats, other forms of group activites are also introduced to the IAs to enhance the development of group discipline. These programs will be discussed i the next section.

The 97,400 ha service area of MRMP is served by three main canals. Two of these have several large lateral canals with lengths ranging from 20 to 58 km, and serving 5,000 to 12,000 ha each. Because of the large size of these canals, the MRMP management decided in 1980 to organize IAs on sub-lateral and small lateral canals of 1,000 to 2,500 ha and to federate these at two higher levels. Thus, IAs on large laterals were federated into Lateral Canal Irrigation Committees, and District Federations of IAs were formed in each of the four O&M Districts of the system (Figure 3). The Lateral Canal Irrigation Committees are informal associations consisting of all the IA Presidents from the lateral. They choose at least one Coordinator who coordinates water distribution, training programs, and other activities on the lateral. He also represents them in special meetings of the District Federation Board. On three very large laterals, there are three Coordinators on each.

The Presidents of all the IAs in a District make up the District Federation. They elect a President, Vice President, Secretary, Treasurer and Auditor, who together with Coordinators of Lateral Committees form a Board. The Federation Presidents serve as channels of communication between the IA Presidents and the NIA District Managers. The four Federation Presidents also sit as regular members of the ADCC to represent farmers' interests. They assist the ADD in monitoring and evaluating of the program because they are able to present to the Council problems that they have systematically gathered from their constituents through the use of a one-page questionnaire. This questionnaire is sent regularly to each IA President, and is now an important monitoring tool for the ADCC.

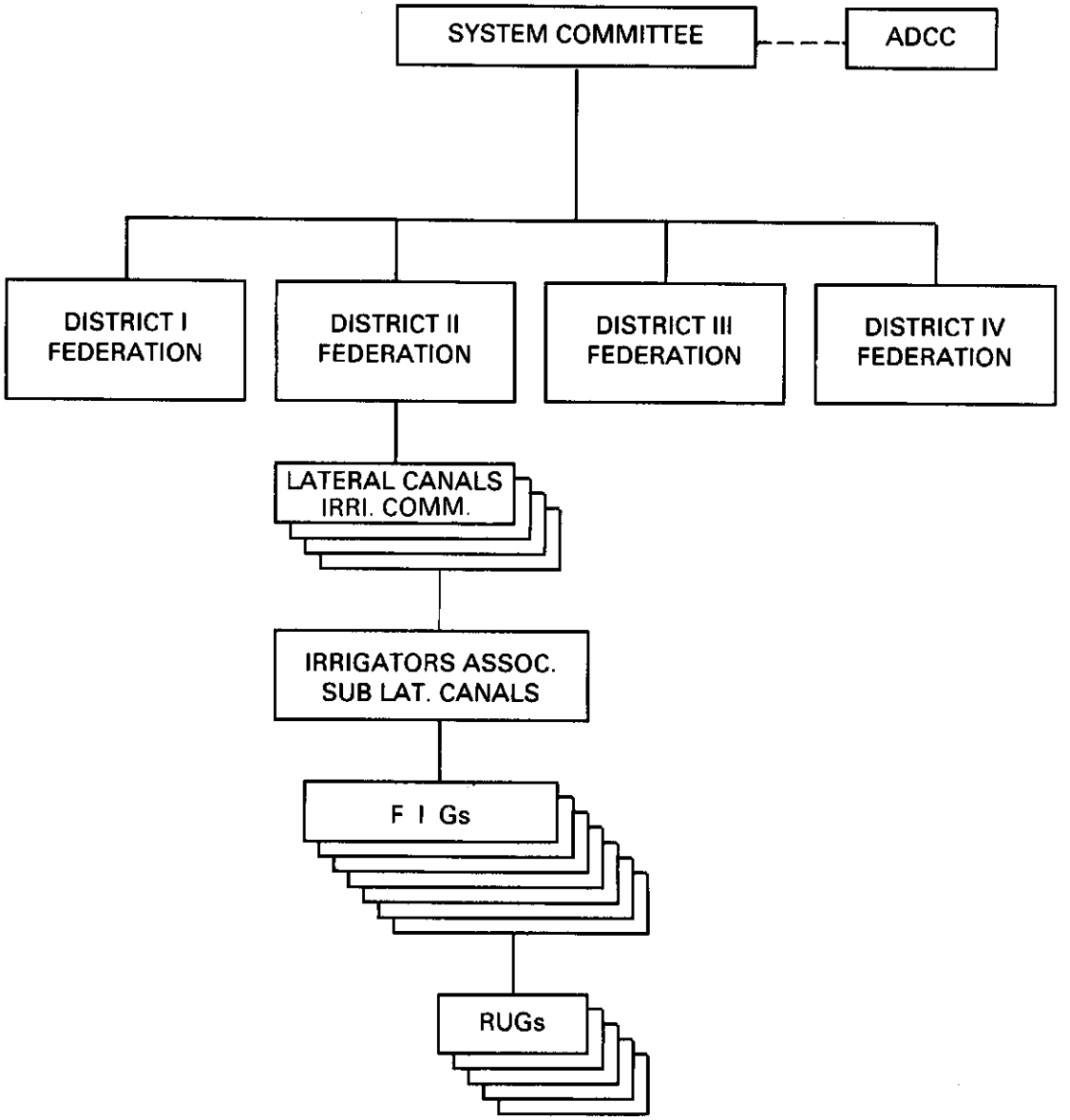
ORGANIZATIONAL DEVELOPMENT AND MAINTENANCE

The farmers at MRMP did not invest a single cent in the construction of the system. They were not even asked to contribute labor in the construction of the farm-level irrigation facilities. The IAs were organized after these facilities were constructed and water was flowing to their farms. Therefore, many members do not have the problem of getting water -- the key function that binds people together in systems that were designed and constructed by the water users themselves, such as the "Zangjeras" of Ilocos Norte in the Philippines and the "Subak" of the province of Bali in Indonesia.

Furthermore, most of the MRMP farmers were victims of previous farmer cooperative associations that went bankrupt due to mismanagement of funds. They did not trust anybody, especially on money matters, and their cooperative spirit and group discipline was low. Most of the farmers interviewed blamed the former officers of these organizations for their inability to manage the funds of the organizations properly. But the officers interviewed claimed that most of the farmer members were non-cooperative, did not care to pay their loans, and were inactive. Many did not attend general assembly meetings and members seldom participated in the discussions of important issues. They only waited for what the officers could give them.

FIGURE 3.

ORGANIZATION CHART OF
WATER USERS ASSOCIATIONS
MRMP 1986



These observations prompted the MRMP management to design a series of exercises to enhance the development of group discipline and self-reliance of the IAs in 1981. Some of these are discussed below.

The Lateral Turnover Program

Under the conventional scheme of irrigational canal maintenance, one Ditchtender is assigned to maintain a canal section 3.5 km in length, called a Ditchtender Section. In addition, the Ditchtender is obligated to collect ISFs and to do other work that may be assigned to him from time to time. For all of these, he is paid about ₱17,000 per annum, including benefits.

In the Lateral Turnover Program of MRMP, participating IAs are obliged to clean and maintain Ditchtender Sections, and assist in the collection of ISFs. They clean the irrigation canal once a month through communal work and distribute water to the FIGs. They are prohibited to subcontract any portion of the Ditchtender Section to third parties except in special cases.

The usual practice in collecting ISFs has been through individual visits to farmers. Farmers usually pay their fees, if at all, only after 2 or 3 visits of a billing clerk or duly designated NIA official. However, under the Lateral Turnover Program, the participating IAs inform the collection officer whenever a group of five or more members are ready to pay their dues. Through this, MRMP saves money and energy. This exercise is designed to prepare the IAs for a bigger responsibility in ISF collection in the near future.

In recognition of these efforts, NIA agreed to pay the contracting IAs ₱500 per month per Ditchtender Section from 1981 to 1983. The amount was increased to ₱600 per month in 1984. NIA also pays the associations a collection incentive fee of 2.5% if their percentage of ISF payments reaches 75% and 3% for 100% ISF repayment. Payment for canal cleaning is not automatic however. Their accomplishments are inspected and evaluated by a Water Management Technician (WMT) before any voucher for payment is prepared. All payments are made by checks so that earnings of the IAs from this program can be easily audited.

During the first two years (1981 and 1982), the MRMP management did not interfere in the management of the IAs' income from the Lateral Turnover Program. But this practice contributed to the weakening of some IAs due to mismanagement of funds. So in 1983, MRMP insisted that all income of the IAs from this program be first deposited in a bank before the IAs could spend it. They were also instructed to prepare an Annual Budget at the end of every calendar year and present it in a general assembly meeting for approval before spending any amount. However, the members of the Board of Directors were given power to enact a special budget in emergency cases, i.e., when a section of the canal assigned to them is washed out and NIA does not have the funds to conduct immediate repair. Under such circumstances the President can withdraw some funds to buy diesel fuel and borrow the appropriate equipment and operators from MRMP, to do the repair work immediately.

Attending to canal clearing is compulsory for all members but in case of emergency, a member can send someone to represent him. He may send one of his children or even his wife, and thus have a representative present for the short meetings conducted by the IAs during breaktime to inform the members of the financial status of the IA or new developments in rice production; and to listen to the problems of the members that could be transmitted to the President of the Federation of IAs. The Lateral Turnover Program thus contributes to strengthening IAs by providing incentives for carrying out important tasks (maintenance), by forcing attendance at regular meetings, and demanding financial accountability of its members.

The number of IAs participating in this program has increased every year since 1981. The participating IAs had received a total of ₱1.8 million from NIA. As of June 30, 1986, a total 154 Ditchtender Sections of 600 km had been awarded to 138 IAs. NIA saves about 60% of its canal clearing and maintenance expenses amounting to nearly a million pesos for the 1985-86 crop seasons (Table 3). This is so because NIA pays about 17,000 pesos per annum to a Ditchtender who is responsible for one section while it pays 7,200 pesos to the IA. About 70% of this amount was spent for repairs of irrigation canals, repair or construction of farm roads, purchase of food, and travelling expenses of officers. The 138 IAs have a total balance in the banks amounting to over ₱510,000 (Table 4).

Table 3. **STATUS OF LATERAL TURNOVER PROGRAM WITH THE IAs - OCTOBER TO JUNE 1986**

Division No:	No: of IAs	Length of Canal (km)	Savings of NIA (₱)
I	61	243	386,100
II	27	106	175,500
III	26	111	175,500
IV	24	100	163,800
Total	138	600	900,900

Table 4. **TOTAL AMOUNT RECEIVED AND BALANCE IN BANKS -1985**

Division No:	Total Amount Received (₱)	Balance in Banks (₱)
I	823,247	215,698
II	323,006	79,569
III	323,507	98,747
IV	341,272	116,018
Total	1,811,032	510,032

MRMP has several lateral canals that are more than 50 km long. At the start of the dry season, water is difficult to deliver to the tail end where most of the IAs are located because of the intervention of some farmers in the upper stretch of the canals, and faulty operation of gates and checks. The delay in water delivery for the dry season crop caused a lot of problems to the IA members. It forced most of them to delay their seedbed preparation and sowing schedules and automatically placed their harvesting period in the rainy months (mid-September to end of November). This often resulted in poor quality yield that commanded low prices. These problems made the Lateral Turnover Program readily acceptable to the IAs, as it enabled them to participate in the preparation of the cropping calendar and water delivery schedules.

The implementation of the program was not always smooth however. In one instance, the contracting IA returned the Ditchtender Section to the Operation and Maintenance Division because the IA failed to receive sufficient volume of water for several seasons. There were also two

instances when a Division Manager of O&M had to propose the cancellation of the contract because the IA failed to do its duty. Both of these IAs have since recovered and are now actively participating. Officers of some IAs have also complained of poor attendance during canal clearing schedules and have suggested the termination of their contracts. But these cases are rare and as a whole the program is functioning well.

The O & M staff of the Operations Manager is now highly supportive of the program. In 1985, when the Project initiated an intensive evaluation of the quarterly accomplishments of the Gatekeepers, Ditchtenders, Water Management Technicians, and Area Engineers in the four districts, the team of evaluators from the Operations Manager's office included the performance of the IAs in canal clearing and irrigation fee collections. The performance of the IAs in canal clearing was compared with the performance of the individual contractors and Ditchtenders based on the following criteria: a) height of grass on canal embankments; b) properly maintained canal cross section; c) properly maintained gates and checks; and d) the amount of debis floating in the canal.

Corresponding grades are shown in Table 5. Overall, the differences in performance among IAs, contractors and ditchtenders are not great, with IAs outscoring others only in District I. As noted above, however, IAs do the same job for 42% of the cost of a ditchtender (₱7,200 versus ₱17,000 per year). Also, where IAs get strong support from O&M management, as has been the case in District I, IAs can do better quality maintenance work than either ditchtenders or individual contractors.

The participation of the IAs in the collection of ISFs was also analyzed and the results were compared on a district basis (Table 6). Overall, the percentage of ISF collected in areas with IAs is considerably higher than where there were no IAs. The importance of strong O&M management support is also clear: District I support for IAs has been particularly strong, and in the areas of District I having IAs, this support has paid off with a high 91% average collection.

The performance of the IAs in maintenance and payment of ISFs was included in assessing the performance of Area Engineers and WMTs. This has changed the negative attitude some District Managers and O & M personnel had about the IAs.

MRMP management recognized that the IAs would require continuing educational assistance until their group discipline had been fully developed. But the office was also aware that it could not fully supply the financial requirements of such a program nor could it even be sure of providing the necessary manpower for such an undertaking in the future. Therefore, the procedure for training officers and members was designed so that the management could gradually wean them from dependence on NIA support. For instance, in the beginning of the intensified training program, MRMP vehicles fetched the participants from their houses and delivered them home after the training period. They were given free board and lodging in the Special Project Integrated Training Center of NIA in the ADD compound at Echaque, Isabela. They were even provided with toiletry articles. During the second round, the participants were advised to assemble in one place in the village where MRMP vehicles could pick them up easily. Then on the third round, they were advised to assemble in a place in the town nearest their place of residence where the MRMP vehicles could get them. Today, they must proceed to the training center at their own expense and shoulder a part of their expenses for food.

Table 5. **COMPARATIVE PERFORMANCE OF DTs, IAs, ICs IN CANAL CLEARING MARIIS-MARCH, 1986**

District No:	IAs %	ICs %	DTs %	Ave. %
I	86	81	84	85
II	78	84	84	83
III	77	83	86	83
IV	79	81	82	81

DTs - Ditchtenders; total number is 425.

IAs - Irrigators Associations; total number is 154.

ICs - Individual Contractors; total number is 37.

Table 6. **ISF COLLECTION PERFORMANCE WITH AND WITHOUT THE IAs - 1985**

District No:	Percent Coll. in Areas with IAs	Ave.Percent Coll.in Areas with No IAs	Ave. Percent Collection
I	91	60	72
II	63	70	69
III	56	57	57
IV	58	46	47
System	67	59	61

Training for Self-Reliance

A similar thing was done in the conduct of educational trips to institutions of learning outside the project service area. For example, when the management brought 40 IA officers to the University of Philippines at Los Banos and the International Rice Research Institute (IRRI), Los Banos, Laguna in 1982, the project shouldered all the expenses of the participants. But for the second trip, MRMP only provided the transport requirements, while Bayer Philippines (a chemical company) and the IA officers shared equally the expenses for food and lodging. On the third trip, the 48 participants purchased fuel and oil for the NIA bus, paid their board and lodging expenses, and shouldered the cost of food for one driver and a mechanic.

Acquisition and Management of Farm Credit

Sufficient low interest and timely farm credit is important in the implementation of the cropping calendar and water delivery schedules. Without credit, land preparation cannot be properly done, and the recommended quantities of fertilizers and pesticides will not be applied by the farmers. Even water will not be applied properly. Hence, production and income of the farmers will be low and may affect their capacity to pay ISF and other obligations. During the project, the farm credit situation was critical because more than 70% of the farmers in the area were getting production loans from informal sources at interest rates ranging from 30-40% per crop season.

To improve this situation, the IAs were taught how to borrow and manage farm credit properly. Special liink-up programs between selected conduits (Land Bank of the Philippines, MERALCO Corfarm and Planters Products Inc.) and some selected IAs were introduced. The programs with MERALCO Corfarm and the Land Bank of the Philippines were particularly successful. MERALCO Corfarm, a private corporation, has just submitted a program of expansion for the 1987 crop seasons. The good results of these projects caught the attention of several institutions. The Isabela State University (ISU) for example is now conducting a feasibility study to determine the potential of using the IAs of MRMP in the establishment of a pilot project on Farmers Cooperative and Agribusiness Development. The Japanese International Cooperation Agency (JICA) is looking into the possibility of establishing an Irrigators Service Cooperative in the MRMP service area. The Manager of the Northern Philippines Grain Complex of the National Grains Authority at Echaque, Isabela is also contemplating a project similar to what JICA is planning.

Group Purchase of Farm Inputs and Marketing of Paddy

The project area is about 350 km north of Manila, the source of most of the farm inputs (fertilizers and pesticides). An additional amount ranging from ₱10.00 to ₱12.00 per bag of fertilizer is charged against the users for transportation and handling costs. Sixty-five percent of the paddy produced in the area is exported to Metro Manila, Southern Luzon, and Central Luzon Provinces. Similar amounts (₱10.00 to ₱12.00) are indirectly charged against the producers again, for handling and transportation incurred by traders. Selling of farm inputs and procurement of paddy largely belong to private agencies. Markups in the prices of fertilizers and pesticides were high and itinerant paddy traders offered higher prices than the local buying stations before the IAs were taught how to buy farm inputs in groups and through canvass bidding in 1982. Since 1984, the farm input dealers have significantly reduced their markups. The local paddy traders have also increased their buying prices to reduce the great difference from those offered by itinerant traders. As a matter of fact, the farmgate price of paddy in the Central Luzon Province and in the MRMP service area are now almost the same in spite of MRMP's distance from Metro Manila. The same is true for the prices of fertilizers and pesticides.

Demonstration Farms (Demo Farms)

The great potential of the MRMP service area for rice production has prompted many agro-chemical company representatives to invade it. They promote many kinds and brands of pesticides and fertilizers and prompted some farmers to habitually use several brands of pesticides with the same active ingredient, which automatically increased their costs of production. To get a larger share of the market, these companies use radio and print advertising at the expense of the users. On the other hand, MRMP is also encountering problems in educating the farmers due to shortage of manpower and funds. During one seminar-workshop the IA officers suggested linking with agro-chemical companies in the establishment of Demo Farms. This was approved by the officers of the four Federations and four companies who joined MRMP management in this effort. A total of 60 Demo Farms are now being conducted every crop season.

The participants in this program were assigned specific functions. The Presidents of the IAs were responsible for selecting the sites for the Demo Farms, selecting farmer-cooperators, and assembling the members to listen to the presentation and discussion of results. The agro-chemical companies were assigned to cover the costs of food and snacks for the training of the Presidents and Farmer-cooperators; and to provide fertilizers and pesticides, sign boards, record cards and technical assistance to farmer-cooperators. In return the MRMP guaranteed to provide irrigation water. The farmer-cooperators provide the land, labor, and other expenses that are required of the Demo Farm. They must also keep records and be ready to present them to the MRMP and company

representatives. The cooperators are also obligated to submit their Demo records for analysis and discuss their experiences during farmer meetings. This program has been going on for several years and more companies have indicated their intention to join the program.

Generating Active Participation of Members During Meetings

It was observed that members seldom participated in the discussion of important issues during meetings. Some officers also behaved similarly. Some of those interviewed said that they were "ashamed" to talk because they were mere members. Officers also told the interviewers that they were ashamed to talk because they might make mistakes or were afraid to offend fellow officers. Communication gaps existed between officers and members and even amongst the officers.

The case of *STARBRIGHT IA* (not its real name) is a good example. This IA had a hardworking, thrifty, and honest President and had signed a Lateral Turnover Contract Agreement with NIA to clear and maintain one Ditchtender Section of the irrigation canal. The percentage of attendance in canal clearing during the first 12 months was excellent. The IA had already accumulated more than ₱7,000 in the bank according to the President. He was planning to buy a residential lot in the village where the IA could construct a multipurpose concrete pavement so that the members would have a place to sun-dry their paddy during rainy months. But after a year, attendance began to decline. The President tried several schemes to solve the problem but failed. He began to worry and thought of returning the canal to the Manager of the Operation and Maintenance Division. So he went to the Office of the Manager of the ADD at Echaque, Isabela to inform the Manager of his plan and to ask him talk to the members of the IA in a general assembly meeting. Instead of delivering a long speech, the Manager asked the officers of the IA how much money the IA had, where it was kept, and what they planned to do with it. The President was the only one who answered all the questions. He even brought the bank passbook out of his pocket and showed it to the Manager. The Manager in turn asked the President permission to pass the passbook around to the members. The members in attendance began whispering and smiling to one another while the passbook was passed around. When asked later who among them could not join the canal clearing due to other commitments, they just smiled.

Several days later, the Manager went back to the place to see what had happened. He arrived when the members had just finished clearing the irrigation canal; all of them in very good spirits. When asked why they were smiling, they said "nothing, we are just happy." But when the Manager interviewed some of them separately and asked them why previous attendance was poor, the truth came out. The answers of those interviewed were similar. All of them thought that their money had already gone with the wind because nobody told them where their money was. When asked again why nobody asked the President about it, their only answer was that they were "ashamed."

To solve the problem of poor participation in discussions, 9 modified panel discussion type of exercise was introduced by the manager of the ADD during training. It is done by subdividing the participants into small groups with five to seven members (the average size of a RUG) and assigning a trainer to serve as moderator or temporary chairman. The rule is that everybody must participate in the discussion, so that when one is called to answer a question, he must stand and answer it, and any answer is considered correct. For example, during one training session, the moderator asked the members of the sub-group this question, "What is your most important problem in rice production?" Caught unaware, the first participant stood up, looked around, scratched his head, and said "I can't think of any" and sat down. The moderator wrote the answer on the blackboard. Already alerted, the next person stood and said "Water, Sir." Again, the moderator wrote "water" on the blackboard, and pointed to the third participant. He stood up and said..., "The same as his." The moderator wrote his answer on the board. The fourth participant said, "Farm

Credit Sir", and so on. After jotting down about twelve answers, the participants were asked to prioritize their problems, and the first question he asked the members of the panel was "Is 'I can't of think of anything' a problem?" Everybody laughed and said "No, it is not." The second was, "Is water a problem?" This time everybody agreed it was. Then the moderator asked them a follow-up question: "If yes, how many of you consider water as your problem?" Almost everyone raised their hand. But when asked again if, "the same as his" was a problem, everyone just laughed.

After the first round of the exercise training, the trainers were surprised to note that those who were not able to give satisfactory answers during the first round of questioning were able to talk indepth in the succeeding rounds. They also discovered that some unschooled participants also shared good ideas, sometimes better than those formally educated. Generally those who talked too much were not effective in solving problems. Silent people, when requested to share their views, often gave better ideas.

Management of IA Funds

Proper management of funds, regardless of amount, is important to a strong farmer organization. This is especially true when the amount is large and not deposited in the bank, and more so if no rules are established on how to spend the money. Take the case of "MOONLIGHT IA" (not real name) as another example. This IA is also a participant in the Lateral Turnover Program and had accumulated more than ₱6,000. The money was being kept by the President because MRMP management had not required him to deposit the money in the bank. The President was the brother-in-law of the Village Chief, who organized a popularity contest to raise funds for a village project. The President of the IA was invited to sponsor a candidate. Without consulting his Board of Directors, he accepted the proposal and invested the money of the IA thinking that he would recover it because his candidate was sure of getting first place. Unfortunately, his candidate lost, so the President was not able to recover the amount. The members of the IA who resided in neighboring villages heard of it and stopped attending canal clearing work until the President tendered his resignation to the Board of Directors. The members did not require him to return the money because the amount was at least used for community improvements.

Since then MRMP management has required all IAs to deposit their earnings in a bank before spending a single cent. All expenditures must be based on an approved budget and the annual budget must be approved in a general assembly meeting. The passbook must be held by the Secretary. Withdrawal slips must be signed by the President, Treasurer, and the Auditor. Another important requisite is the presentation of income and expenses at every meeting, whether it is a special or a general assembly meeting.

To implement these requirements properly, the agricultural economist of the ADD and accountants of the project gave the Advisors special training on budget preparation, book keeping, and accounting. Officers of three to four adjacent IAs were assembled in one place for one day of training. The participants were required to bring with them records of income and expenses so that the trainers could use actual figures in the accounting exercise. In addition, the participants were required to bring their own food because MRMP did not have funds for that purpose. Each of the participating IAs contributed some amount for the food so that even the resource speakers were given a free lunch and snacks.

This exercise improved the way IAs manage their funds. Today, only one President still insists on acting as the Treasurer, Auditor, and President at the same time. This is a special case because it seems that most of the officers are afraid of the President, perhaps because he is a member of the municipal council. He is also the president of another farmers association that was able to get a huge loan from the livelihood program of the Ministry of Human Settlement but was delinquent

in paying the required amortiziations. Unfortunately, the members of that association are also members of the IA. The managements of both MRMP and the Ministry of Human Settlement are now looking into the possibility of auditing the books of accounts of the two associations at the same time to solve this problem.

At this point in time one can say that the IA advisors or organizers have played important roles in the organization of IAs in the MRMP service area. It can also be said that their maximum efficiency and effectiveness depends on the support and understanding of the four O&M District Managers because irrigation water, which is the most important tool for development of water users associations, is controlled by them. Without their full support, the targets of the organizational development program for the IAs may not be achieved. As shown above, District I overshadowed the accomplishments of other districts in the number of IAs organized, performance ratings of IAs in canal clearing, percentage of ISF collection in areas covered by IAs, number of Ditchtender sections awarded to IAs, and the amount of ISF collection incentives paid to participating IAs. Also in District I a good number of IAs participated in the construction of supplementary farm ditches in the expansion area in 1985 when the project management told them that funds were not yet available.

PROBLEMS AND SOLUTIONS

The program implementors faced several problems from both farmers and government agencies during the process of organizing IAs. The problems included inconsistency of administrative and hydrological boundaries; resistance of some farmers to joining the IAs; lack of appropriate government policies to support the program; and resistance by some agency representatives to developing strong IAs.

Farmers Insisting on Administrative Boundaries

Lateral canals serving two or more villages, towns, or in some instances two provinces (Isabela and Quirino) are common. Some of the farmers, especially those also holding political positions and those that do not have good relations with the officials of adjacent villages, insisted on subdividing the canals into sections based on administrative boundaries so that each village would have just one IA. To solve this problem, the IA organizers and supervisors visited the local officials individually and explained the advantages of adopting hydrological boundaries in organizing IAs. Once convinced, they were invited to speak to their respective constituents before allowing the farmers to elect the IA officers. The procedure was done in such a way that all villages would be proportionally represented in the IA. IA funds for community improvement projects such as multipurpose concrete pavements, repair or improvement of farm to market roads, etc. were allocated proportionately to the number of farmer-members from each village. The canal section was subdivided into subsections and each village assigned one subsection to clean and maintain.

Farmer Reluctance to Join the IAs

Today, only 42% of the service area of 97,400 ha is covered by the 240 IAs. These IAs are located primarily at the middle or tail-end portions of irrigation canals, where insufficient and untimely water delivery was a common problem. But even in these areas, there are farmers who have not joined the organization because they see no advantage in doing so. These are the farmers who can get water without exerting additional efforts, because their farms are located either near the headgate or near the turnout and the farmers are able to operate their farms without getting loans from any bank.

Generally, farmers in the upper stretch of the lateral canals are not interested in joining IAs for similar reasons. Those interviewed say, "Why should I join any IA when both non-IA members and members pay the same amount of ISFs and receive a similar amount of water in the system." They do not help in emergency repairs of irrigation canals.

Because of these problems, the officers of the 240 IAs requested the Project Management to make membership in the IA compulsory for all farmer-beneficiaries of the project; or alternatively, suggested NIA increase the amount of ISF rates for non-members as an incentive to join. These requests are being evaluated at present.

The Absence of Appropriate Policies to Support the Program

As mentioned previously, strong IA participation in the O&M of the system is indispensable. Efficient and effective collection of ISFs can be attained only through active IA participation. The irrigation facilities were nearly finished when the program to organize the IAs was introduced in MRMP. This was because the loan agreement did not require the organization of IAs and NIA had not established guidelines for organizing IAs in large systems like MRMP before the start of project construction. Therefore NIA was not able to respond quickly to the requests of the IA officers to make membership mandatory or to increase ISF rates for non-members.

Billing the FIGs and eventually even the IAs instead of billing individual farmers for ISFs is another area which should be studied in large systems so that appropriate policies similar to what NIA has for small systems can be formulated. This could mean savings for NIA and enhance the respect of farmer-beneficiaries for the officers of FIGs and IAs. It can also promote 100% membership to IAs. This proposal is discussed further below.

Job Insecurity of IA Organizers

The Agricultural Development Division has three Sections, the Land Use and Water Management Section (LUWMS), the Farmers Assistance and Training Section (FATS), and the Evaluation and Statistics Section (ESS). The management had originally employed more people in LUWMS to intensify its activities in promoting rotational irrigation, but these efforts did not pay off due to lack of farmer organizations. That was when the management recognized the importance of having strong IAs. Thus, starting in 1979, the management started to reinforce the manpower of the FATS, the section that was responsible for organizing FIGs.

However, during the last quarter of 1981, the project was forced to reduce its manpower due to limited funds. The ADD was severely affected by it because the office had just started to organize IAs at that time. The worst part came at the end of 1983, when the project was instructed to lay off all of its casual employees. The hardest hit was the FATS because 15 of its 19 IA Advisors were casual employees. Their duties and responsibilities were transferred to 15 new persons that were themselves transferred in from the LUWMS. Table 7 shows the shifts in manpower that occurred during this period.

Unfortunately these people were not trained for the new assignment, so it took them some time before they became effective. By then, most of the IAs under their supervision had become weak and had to be revitalized. The situation became worse in 1984 when requests for the organization

Table 7. **AGRICULTURAL DEVELOPMENT DIVISION MANPOWER MOBILIZATION, DEMOBILIZATION AND DISTRIBUTION**

Year	LUWMS	FATS	ESS	TOTAL
1975	-	-	-	7
1976	17	17	15	49
1977	26	11	7	44
1978	42	29	26	97
1979	38	31	26	95
1980	47	25	23	95
1981	28	21	19	68
1982	21	20	14	55
1983	20	19	14	53
1984	5	28	8	41
1985	-	19	3	22
1986	-	20	3	23

LUWMS - Land Use and Water Management Section

FATS - Farmers Assistance and Training Section (FIG & IA organizers)

ESS - Evaluation and Statistics Section

of additional IAs poured in. Finally, in 1985, the IA organizers were instructed to slow down in organizing additional IAs because each of them was already supervising 19 IAs. There was considerable damage to the program. About 30% of the 240 IAs that the project has today need to be revitalized.

Uncooperative Operation and Maintenance Personnel

Full support and cooperation of the O&M personnel in the development of IAs is indispensable. But most of them were afraid of having strong IAs that would take over their work after the project. Their suspicion became stronger when the Management started turning over to the IAs some Ditchtender Sections for partial O&M. Some Ditchtenders were transferred to other places while those who retired were not replaced. Their fear grew stronger when the area covered by a Water Management Technician was increased from 500 ha to 1000 ha due to the retrenchment policy of NIA. These changes made the work of the IA organizers more difficult and frustrating. Nevertheless, some O&M District Managers continued to be supportive of the IA program.

Superficial Support of Some Agencies

While it is true that all members of the ADCC signed a Memorandum of Agreement to guarantee their full support to the program, some were lukewarm in their actions because they were also mandated to organize farmers associations. Thus, at the

early stages of program implementation, support from some Government agencies came in trickles. The situation however changed when many of the IAs became active and began to exert pressure on these agencies. This was especially true when the four Presidents of the District Federations of IAs joined the ADCC as regular members.

LESSONS LEARNED THROUGH ORGANIZERS' EXPERIENCE

The people engaged in organizing and developing the IAs at MRMP were just ordinary agriculturists. Nobody had had previous experience in organizing water users associations before their transferred to MRMP. Their training in organizing IAs was acquired while they were organizing FIGs. But these people worked hard under pressure. They were dedicated, creative, and had strong initiative. They jotted down their errors and exceptional accomplishments and exchanged ideas with each other. Some of their own observations and the impact on the program are discussed in this chapter.

The IAs, if Properly Motivated, Will Participate in the Operation and Maintenance of the System

Some top officials thought that strong IAs would fight against NIA in the near future. These people therefore did not give full support in organizing and developing IAs. Project records tend to show that their fears were not justified, especially regarding how the IAs spent the money they earned from the Lateral Turnover Program. The 138 IAs have collected a total of ₱1.8 million since 1981. Their remaining balance in the bank at present (1986) is only ₱510,000 because they have spent a good portion of it for the construction of multipurpose pavement, repair of farm roads, and purchase of diesel fuel to operate heavy equipment of MRMP to clean irrigation canals when the project did not have funds for this. This is a clear sign that IAs can be constructive and useful. The case of Division I of MRMP is an example. Because of the strong support that it gave to the IAs in its service area, the Division had the largest number of IAs (Table 8); the largest number of ditchtender sections turned over to IAs (Table 9); the highest percentage in irrigation fee collection (Table 6, above); and the highest amount of ISF collection incentives paid to IAs (Table 10).

Table 8. **NUMBER OF IAS ORGANIZED BY DIVISIONS 1985**

Division No:	No: of IAs Organized	Area (ha) Covered	Percent: of Service Area
I	77	12,284	51
II	54	8,418	35
III	74	11,704	49
IV	32	6,380	27
Total	237	38,794	41

The Barangay Chairman as President of IA

During the first three years of program implementation, most of the IA Presidents were either Barangay (village) Chairmen or Samahang Nayon (SN) Presidents. Those SN Presidents holding concurrent positions in IAs posed no problem because most of the SNs were inactive. However, most of the IAs who have Barangay Chairmen as their Presidents have not performed very well.

Table 9. **NUMBER OF DITCHTENDER SECTIONS MAINTAINED BY ICs, IAs AND DTs**

Division	Number of Ditch Tender Sections Maintained By:		
	ICs	IAs	DTs
I	17	59	43
II	3	27	88
III	2	26	66
IV	15	24	47
Total	37	136	244

Legend:

ICs - Individual Contractor
IAs - Irrigators Associations
DTs - Ditchtender

Table 10. **AMOUNT OF ISF COLLECTION INCENTIVES PAID TO IAs - 1985**

Division	Amount Paid to IAs (₱)
I	73,671
II	Data not yet available
III	42,493 (Not yet awarded)
IV	18,468 (Not yet awarded)

Some of them are simply overworked, while others have been suspected of being biased against other villages in the distribution of water and in the allocation of IA funds for community improvements. This was especially true during recent years in cases where the Village Chairman was not supported by the people but was there because the Municipal Mayor wanted him in the place.

Different Management Strategies in Canal Clearing

Every IA has a fixed date for canal clearing and every member is obliged to participate. In most cases, the whole group works together to clean the whole stretch of canal assigned to them. But some IAs have subdivided their members into sub-groups assigned a definite area to clean every month. The criteria for subdividing members varies. If the members came from two villages, then two sub-groups will be organized; if the IA covers three villages, then three sub-groups will be organized. This procedure saves a lot of time and effort for the President. Others subdivide the canal sections based on the number of FIGs and every FIG Chairman automatically becomes a sub-group leader. Some IAs allocate funds to these sub-groups, but the money can only be disbursed to the leader of the group after a voucher is presented for the signatures of the President, Auditor, and Treasurer for payment.

The IA as an Effective Pressure Group

The IAs at MRMP are fast becoming effective and responsible pressure groups to uncooperative Government representatives. If a request to a government technician is not answered after two verbal notices, this is followed by a resolution with a copy furnished to his Provincial Chief. If the resolution is not answered on the expected date, a copy is forwarded to the Minister of the concerned agency. Because of this, all members of the ADCC have been punctual in answering IA questions.

Even Her Excellency, President Corazon Aquino has listened to the requests of the IAs. In March 1986, the Presidents of the four Federations sent a telegram requesting her to release more funds for paddy procurement to the Managers of the National Grains Authority (NGA) in the Provinces of Isabela and Quirino. After just one week, additional funds were released and NGA representatives in the two provinces started buying 75 cavans from every farmer instead of only 25 cavans. Even the NIA is not exempted from this pressure. If a District Manager of O&M does not listen to their requests for equipment, IAs go to the Operations Manager to get appropriate action.

IMPORTANT LESSONS LEARNED FROM MISTAKES

Both MRMP top management and IA organizers made mistakes in the process of organizing the IAs. Most of these were at the FIG level. Some were corrected immediately while others remain unsolved. The MRMP management is now drafting a Five-Year IA Development Program to rectify these errors. Some of the sources of learning are discussed below.

FIGS were Organized Even if Attendance at Orientation Classes was Low

As mentioned previously, the smallest unit of Farmers' Group in the service area is the RUG. Its service area ranges from 7 to 10 ha cultivated by three to seven farmers. Farmers in every Rotational unit are mandated in the loan agreements to organize themselves into an informal group. The RUG is headed by a leader called Rotational Unit Leader (See Figure 3, above).

Three to five Rotational Units constitute a Rotational Area. A Rotational Area should have the following irrigation facilities: a double-gated turnout, a main farm ditch, three to five supplementary farm ditches, farm drains, division boxes, end checks, and when necessary, several internal farm ditches. Its service area ranges from 25 to 50 ha cultivated by 15 to 25 farmers.

Similarly, farmers in the Rotational Area are mandated to organize themselves into a farmers' group called FIGs. The FIG organizers are responsible for organizing this group. Its officers are composed of a Chairman and Rotational Unit Leaders.

The strength of any IA largely depends on how well the RUG Leaders and the FIG Chairmen are selected. But the correct procedure of organizing some of these groups (RUGs and FIGs) was not followed due to the poor attendance of farmers during orientation classes. In many cases, this resulted in the selection of inappropriate RUG leaders and FIG chairmen. It also resulted in some members being unaware of the duties and responsibilities in the equitable distribution of water and in maintaining farm-level irrigation facilities.

These errors could have been avoided if at the start of the program implementation, irrigation water was not released to the turnout until all of the farmers had attended the orientation classes and proper organizations of RUGs and FIGs had been completed.

Neglect in Getting the Farmers' Signatures on the FIG Membership Agreement

To make matters worse, the IA Advisors did not require those who attended the orientation meetings and election of officers to sign the FIG Membership Agreement. This agreement states among other things the duties and responsibilities of the officers and members together with the corresponding farm sizes. This was another reason why some members did not even know who their other companions in the turnout were. Since 1985, in newly organized FIGs, farmers are required to sign the Membership Agreement.

MRMP Started Too Late in Organizing the IAs

MRMP Management only thought of organizing the IAs in 1980 when a majority of the 1,589 FIGs were very weak. Moreover, the weak FIGs were not all located in one place. They were scattered in different sections of the irrigation system where they could easily draw water. These FIGs did not practice proper water management and did not care whether FIGs at the end of the channels were getting enough water or not. Because of this, the organizers had to revitalize the FIGs before they could organize an IA. This practice made the process of organizing the IAs more time consuming and expensive. This expense and time could have been saved if the plan of organizing an IA in every lateral canal had been included in the original program of work for organizing water users associations. These problems occurred because there were no existing policies or guidelines in organizing IAs in large systems.

Dedicated Advisors Are Indispensable

Mrs Always Smiling (not her real name) was one of the original IA Advisors that participated in organizing IAs from 1980. She was laid off in 1983 due to NIA's retrenchment policy. In 1982, two of the nine IAs that she had organized were able to borrow more than eight hundred thousand pesos (₱800,000) each from a special program, the "Kabuhayan, Kalusuyan and Kaunlavan (KKK)" of the Ministry of Human Settlement. The money was used to finance the purchase of farm inputs, farm tractors, paddy threshers and the construction of a warehouse for the use of their members. When the author was invited to attend the annual meetings of the two associations in 1984, he was surprised to see Mrs Smiling sitting in the Board of Directors Meeting. After the meeting the author casually asked her if she had taken to farming and joined the two associations. Her answer was "No, Sir." When asked what brought her here, Mrs Smiling said that immediately after she was laid off by MRMP, both IAs passed resolutions requesting her continued assistance to the two organizations. In the meantime she was still looking for new employment. In return, the two IAs were each paying her four hundred pesos (₱400) every month. She said "At first, I was reluctant to receive the money but they were very insistent, so....here I am." When asked how she was able to get the sympathy of the IAs, Mrs Smiling said that she just followed the advice, "Be dedicated and honest with your work." The former IA Advisor said, "Among others, I work like a Doctor of Medicine, attending to IA officers and members that visit me at home after office hours, responding to the requests of IA officers to attend meetings during Saturdays and Sundays and even in the evenings sometimes, teaching them how to prepare their account books, how to use farm inputs properly to get maximum yield, how to buy farm inputs in bulk, and how to sell their produce to the National Grains Authority and itinerant traders."

The Proposed Five Year IA Development Plan

The ADD is now preparing a five-year IA Development Plan entitled "Progressive Billing." This program is intended to strengthen the control of the FIGs over non-IA members and to force non-members to join IAs. If implemented properly the plan should also greatly improve NIA's efficiency and effectiveness in the collection of ISFs.

Farmers today are billed individually for ISFs, which means that if there are 25 farmers in one FIG, 25 bills are prepared and served. This practice is time consuming and expensive because it takes two to three visits before a bill collector can collect the ISF payment from a farmer. In the Progressive Billing Program, the turnout structure will be given a permanent number. The number will be painted on the structure, big enough to be seen at a distance. Master lists of farmers in every FIG will be updated including the areas of each farm. Farm level irrigation facilities will be inventoried and the service area precisely defined, with the participation of farmer-members of the FIG. Then the parcellary map will be updated to serve as a permanent reference for both parties.

Instead of preparing the bills for individual farmers, only one bill will be prepared for the FIG. In turn the FIG Chairman will bill the members and collect the ISF from them. The FIG Chairman or his collector will have to be bonded. The savings from this program will be divided into three equal parts. The first part will go to NIA, the second part to the FIG, and the third part to the IA that covers the FIG.

After perfecting the FIG billing scheme, the plan envisages moving to the second step, billing the IA. At this stage, NIA is expected to save even more from the program and the IAs' participation in O&M will be greater. In a real sense, running the system through this scheme will be a partnership between the IAs and NIA in the future. Under this plan, the IAs and the FIGs will be able to discipline their members. Even the farmers who are not members of the IAs will be subject to this program, so similar discipline can also be applied to them by the IA officers.

The plan must be accepted first by both parties (NIA Central Office and the IAs, through the Presidents of the District Federations) before it becomes implementable. Simple lobbying will be done to explain the concept to all concerned. One or two pilot projects in each of the four irrigation districts will be organized. These will be observed for at least two crop seasons. The results will be discussed with the participating officers of the IAs, IDD[3], and O&M personnel. Presidents of IAs with good potential will also be invited to the discussions.

Training programs for IA officers, IA Advisors, O&M and IDD personnel will be prepared and submitted to the Administrator of NIA for his approval and funding support. The management will avoid abrupt expansion of the program. It will create a committee that will establish criteria to govern the expansion program. The committee may be composed of the four O&M District Managers, the four Federation Presidents, the IDD Manager and another person from the office of the Operations Manager. Some irrigation officials and farmer leaders from a pump system where the IA is already empowered to collect ISF from its members will be invited as resource speakers. If this type of program is implemented on other national systems, educational trips to these schemes will be a part of the training program.

IMPORTANT FACTORS THAT FAVOR THE ORGANIZATION OF IAS

The commitments in the loan agreements of both Upper Pampanga River Project (UPRP) and Magat River Multipurpose Project (MRMP) are the same. As a matter of fact the loan agreements for MRMP were based on those for UPRP, the first large irrigation project funded by the World Bank in the Philippines. Both were required to organize an ADD, establish an ADCC,

---

[3]The Institutional Development Divison (IDD) is the new name for what was the Agricultural Development Division (ADD).

construct and operate a water management training center, organize FIGs, and promote rotational irrigation practices on the farm level. However, UPRP started organizing IAs only after MRMP had demonstrated the feasibility of orgainizing IAs. The question is.....why?

The author believes that several factors played important roles in organizing IAs at MRMP in 1980. It could be due to any or all of the following:

1. The years of experience of the Manager of the ADD of MRMP in the preparation and implementation of agricultural development programs. As an agriculturalist, he taught vocational agriculture in an agricultural high school for five years. He became a research person in agronomy when he transferred to the Ministry of Agriculture for five years, a provincial director for the rice and corn program for six years, and a national coordinator for food production for three years before he moved to NIA to head the ADD of MRMP as Manager. His concern for the farmers is inborn because his parents and brothers are farmers and he himself farmed before earning his Bachelor's Degree in Agriculture.

2. The support and trust of his project manager. The project manager gave him the full authority to select and recruit the best people that he could find in the region to fill the positions in the ADD, and who approved practically all his ideas in the organization of Farmers Associations. Even the supervision in the design preparation and construction of the Water Management Training Center for the project was delegated to him by the project manager. The project manager also designated him as the permanent executive secretary of the ADCC to promote inter-agency coordination. Without this support, the ADD could not have succeeded in organizing IAs at MRMP.

3. The retrenchment policy of the Philippine Government that had adversely affected NIA's funding for O&M in 1977 and MRMP in 1979 gave MRMP management the strong determination to organize IAs to develop farmers' participation in the O&M of the system in order to reduce its cost but maintain the system in good operating condition.

4. The farmers' problems in getting sufficient and timely delivery of irrigation water during project construction, compounded by the problems of production loans, expensive farm inputs and low farmgate price of paddy might have made farmers responsive to the program.

5. The willingness of the members of the ADCC to forget professional jealousies in the delivery of agricultural support services to the farmer-beneficiaries of the project gave a strong push to the IA development program.

6. The receptive attitudes of NIA Administrators to new innovations emanating from their subordinates in the field inspired the MRMP management to be more creative in finding solutions to NIA and farmers' problems.

7. Finally, the strong determination of the personnel of the ADD to justify their existence in the NIA forced them to be more creative in implementing the official functions of the division beyond everybody's expectations.

CONCLUSION

The most prevalent problem of formal and informal farmers associations in the past has been the lack of group discipline. Many well-intended government programs fail to attain their goals

and objectives primarily because the members of farmers associations are not able to police their own ranks.

Hence, the main objective of the IA Organization and Development program of MRMP is to develop strong group discipline amongst its members, so they can police their own ranks while their organization is participating with NIA in the O&M of the system. It also hopes to establish a cooperative attitude amongst its members that can stand the rigors of time, with only minimum support from the Government. These associations were not designed to fight NIA in managing the irrigation system. Nor were they designed to fight against other agencies in the delivery of support services. Instead, they were designed to work harmoniously with all agencies in agriculture to promote irrigation efficiency and agricultural production on bilateral terms.

At this point, MRMP has just scratched the surface that will lead to the full development of the IAs. Only 42% of the project service area is covered by the 240 IAs. The service areas of these IAs are still very fragmented. The group discipline that the members have today is temporary in nature, and can disintegrate the moment present assistance is withdrawn, because the development of cooperative attitudes takes time. This may come only after the present generation of farmers has transferred its cooperative practices to the succeeding generation. This is so because most of the farmers in the area were witnesses to the farmer associations and cooperatives in the past that died a natural death due to both the mismanagement of funds by some of the officers, and members who did not do their assigned duties and responsibilities.

Therefore, MRMP has decided to provide a continuing educational program to the IAs after the project. Starting in 1987, MRMP plans to delegate additional power to the IAs in the collection of ISFs so that irrigation water can be effectively used to discipline farmers in the service area. A strong monitoring and evaluation capacity will be established in the Agricultural Development Division to periodically evaluate the activities and accomplishments of the IAs and all concerned to improve the implementation of the program as the need arises.

Today there are farmers' associations in the Philippines that attend rallies in Metro Manila to present their problems to the authorities. Some of them spend their own money and sometimes get hurt during the process. In most cases they do not get what they want. The IAs at MRMP are different. Instead of attending rallies, they send resolutions to the authorities or invite responsible people in the Government for a dialogue and get positive answers, as indicated by the positive response of the President herself to a request to release additional funds to the NGA branch offices in Isabela and Quinino provinces.

The IAs were also able to help NIA in reducing its cost of maintaining irrigation canals by participating in the Lateral Turnover Program where NIA spends less than half of the amount normally paid to Ditchtenders who do similar work. They also can help NIA reduce its ISF collection expenses by paying their ISF obligations in groups.

Even the communication process between the farmers and the representatives of the different agencies engaged in rice industries has been facilitated. Individual contacts with farmers have been minimized because the IA officers have also acted as liaison officers between the two parties. The farm input dealers say that their sales have increased because more and more farmers appreciate the importance of fertilizers and pesticides.

Organizing effective, self-reliant farmers' organizations takes time, patience, and skill. Although MRMP still has a long way to go in achieving all its objectives, it is clear that much has been accomplished, and that the efforts made to develop farmers' organizations have been worthwhile in the short run, and can prove extremely beneficial to both Government and farmers in the long run. It is hoped that others will find the lessons learned by MRMP useful in planning similar programs.

REFERENCES

Bagadion, Benjamin U. (1985). Farmers' Involvement in Irrigation Development in the Philippines. In *Participatory Experiences in Irrigation Water Management.* Proceedings of the Expert Consultation on Irrigation Water Management held in Yogyakarta and Bali, Indonesia, 16-22 July 1984. Rome: Food and Agriculture Organization of the United Nations.

Bagadion, Benjamin U, and Frances F Korten. (1985). Developing Irrigators' Organizations: A Learning Process Approach. *In* Michael M Cernea, ed., *Putting People First: Sociological Variables in Rural Development.* Published for the World Bank. New York: Oxford University Press.

Korten, Frances F.(1982). *Building National Capacity to Develop Water Users' Associations: Experience from the Philippines.* World Bank Staff Working Paper No. 528.

Uphoff, Norman, Ruth, Meinzen-Dick, and Nancy, St. Julien. (1985). *Improving Policies and Programs for Farmer Organization and Participation in Irrigation Water Management.* Water Management Synthesis Project Professional Paper No. 1. Ithaca, NY: Cornell University.

ACRONYMS AND GLOSSARY

ADCC	Agricultural Development Coordinating Council
ADD	Agricultural Development Division
ARBA	Agrarian Reform Beneficiary Association
CFA	Compact Farms Associations
DT	Ditch Tender
ESS	Evaluation and Statistics Section
FATS	Farmers Assistance and Training Section
FIG	Farmers Irrigators Group
IA	Irrigators Association
IC	Individual Contractor
IRBA	Isabela Rural Bankers Association
LUWMS	Land Use and Water Management Section
M-99	SELDA Masagana 99 Cell
MRMP	Magat River Multipurpose Project
MRIS	Magat River Irrigation System
NGA	National Grains Authority
NIA	National Irrigation Administration
O & M	Operation and Maintenance
RUG	Rotational Unit Group
SIFFRIS	Siffu River Irrigation System
SN	Samahang Nayon
WMT	Water Management Technicians

PUBLICATION SURVEY AND MAILING LIST ACCESS FORM — CASE STUDY REPORT NO. 1

Your answers to the following questions will help IIMI prepare better reports and disseminate them more effectively. Your help is greatly appreciated.

Did you: [ ] request this report, [ ] receive it automatically from IIMI, [ ] get it from someone else, [ ] find it in a library?

Did you: [ ] read all of this report, [ ] read or skim only parts of it, [ ] skim all of this report, [ ] not read it at all?

If you did not read or skim this report, was it because [ ] the subject matter does not interest you, [ ] not enough time, [ ] repeats other material you have read, [ ] other? _____

If you read or skimmed this report, was it useful? [ ] yes, [ ] no
If "yes," in what way? _____

If "no," why not? _____

After reading or skimming the report, did you: [ ] throw it away, [ ] put it in your own private files, [ ] pass it to someone else, [ ] put it in a library, [ ] other? _____

How could we improve the report? _____

In what condition did the report arrive? [ ] acceptable, [ ] unacceptable. If "unacceptable," please explain: _____

1. I'm mainly interested in:
   (Check one only)
   [ ] Govt-managed systems only
   [ ] Farmer-managed systems only
   [ ] Both systems equally

2. NATIVE LANGUAGE _____
3. NATIONALITY _____
4. MAJOR DISCIPLINE _____

5. I'm mainly interestd in IIMI programs in:
   (Check one only)
   [ ] Systems performance evaluation
   [ ] Management for diversified cropping
   [ ] Resource mobilization
   [ ] Irrigation institutions
   [ ] System rehabilitation & improvement
   [ ] Farmer managed systems
   [ ] Professional development
   [ ] Documentation and information
   [ ] Communication networks

6. Age _____ 7. Sex: M [ ] F [ ]

8. HIGHEST DEGREE
   (Check one only)
   [ ] High school or equivalent
   [ ] BA/BSc
   [ ] MA/MSc
   [ ] PhD or equivalent
   Other, _____

9. PRINCIPAL OCCUPATION
   (Check one only)
   [ ] Researcher
   [ ] Administrator
   [ ] Educator/Extensionist
   [ ] Irrigation system manager
   [ ] Private enterprise
   [ ] Librarian/Documentalist
   [ ] Journalist/Editor
   [ ] Consultant
   Other _____

If you wish to be added to IIMI's mailing list for publications, please complete the above survey and the following form. Be sure your address is legible and the information is complete - PRINT or TYPE - Thank you.

NAME (Print) _____

TITLE _____

ORGANIZATION _____

ADDRESS _____

COUNTRY _____ POSTAL CODE _____

---

tear carefully and MAIL TODAY!

fold here

Name _____

Address _____

_____

Country _____

Communication & Publication Office
INTERNATIONAL IRRIGATION MANGEMENT INSTITUTE
Digana Village, Kandy
Sri Lanka

fold here

tear carefully and MAIL TODAY !

tear carefully along perforation, fold on lines, and MAIL TODAY !